

Manufacturers Record

Exponent of America



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Baltimore, Md.
MAY 13, 1920

A Call From a Laboring Man to Labor Men

Cunningham, Ky., April 27, 1920.

Editor Manufacturers Record:

Enclosed please find check for \$6.50 in payment for my subscription to the world's greatest publication. My greatest desire would be satisfied if the MANUFACTURERS RECORD could be read each week by every intelligent laboring man throughout the length and breadth of our country. Go ahead! You are sound economically, correct politically, and morally your every issue rings true. The high cost of living will never change until the laboring man realizes that it will be only through greater production and not an eight-hour day as a panacea. I am only a laboring man, but I would be satisfied to see the present wage scale maintained and production increased to the point where I could buy more with my dollar instead of a decreased production where two dollars will not have the purchasing power of one.

J. MCL. RIDGELL.

The need for increased production is greater than it was during the war.

We need several million dwellings, we need \$5,000,000,000 expenditure for railroad improvements, we need more food and more food conservation, we need more coal, more cotton, more iron and more steel, more lumber, more bricks and more cement. Indeed, our needs are almost infinite, and they are of infinite importance in order to provide the things which are essential to individual and national safety.

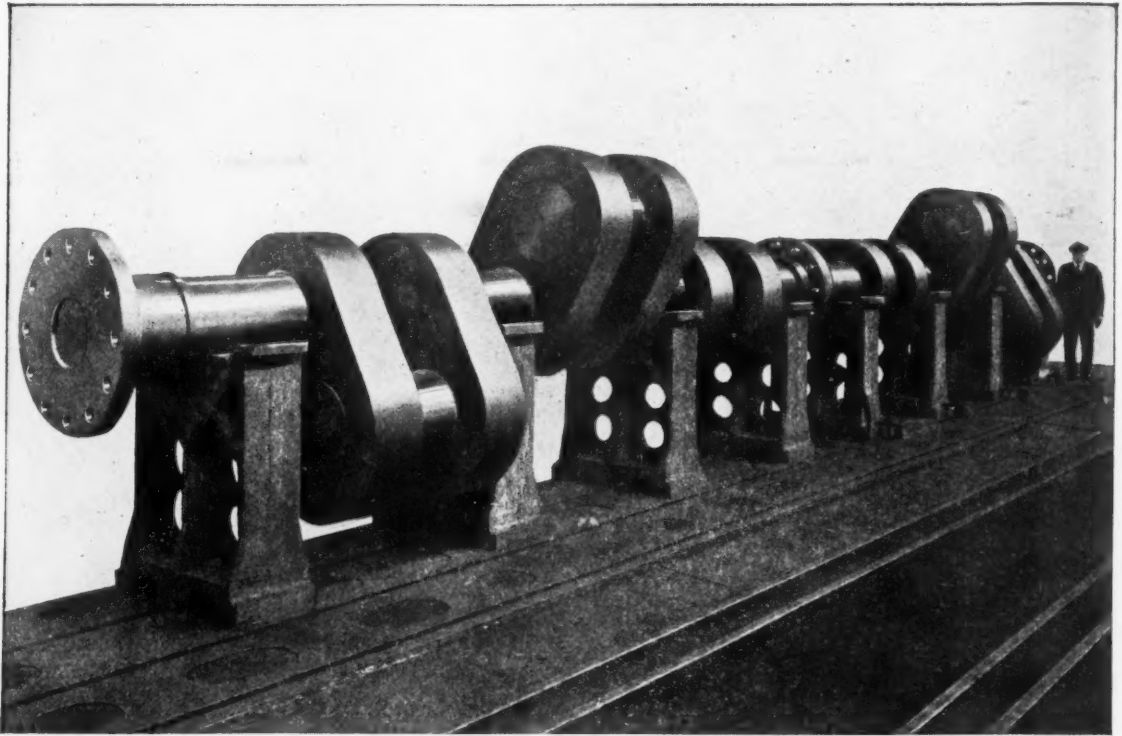
There is only one way in which we can meet these needs, and that is by intensive, all-pervading, never-tiring work.

In limiting production by lessened efficiency or lessened hours we are only intensifying the situation and making more acute the shortage of everything, increasing the scarcity and the cost of homes, and reducing the food supply and steadily increasing its cost.

Our subscriber, who writes as from one laboring man's standpoint, has stated the case with absolute truth, and it is a pity that his call to other laboring men cannot be read by every man and woman in the country, for the rich and the poor, the employer and the employe alike need to fully understand these facts.

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Manufacturers Record

Exponent of America

MAY 13, 1920.

Volume LXXVII.

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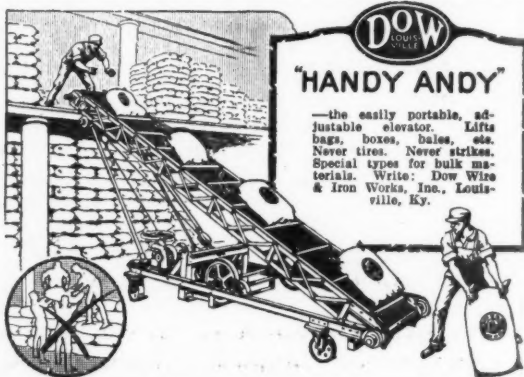
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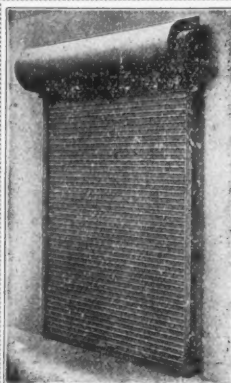
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THE COUNTRY MUST NOT BE CALLED ON TO CHOOSE BETWEEN JOHNSON AND McADOO.

BY a sort of default in interest, there has been no great campaign for the Democratic nomination for the Presidency. The mentality of one man has so long dominated the party, and the continuance of that domination is so cheerfully acquiesced in, that the San Francisco convention is not likely to do more than adopt the platform presented for its approval, put the party banners in the hands of Mr. McAdoo and make a fight for a general endorsement of all Administration policies.

The election of Mr. McAdoo, of course, would be a national misfortune. Not only would it lengthen the influence of Mr. Baruch in the White House and thus continue to put the secrets of future Government action in the possession of a gentleman whose vast wealth has been gained in speculative rather than in productive adventures, but it would render certain the conduct of the Government for four more years along the lines of demagoguery. The country had a taste of Mr. McAdoo as Director-General of Railroads. The great economies which he promised became, in fact, magnificent deficits. He retired, it is true, in time to avoid the problems which threatened to involve political considerations, and was out of the Treasury at the time that institution determined to inaugurate policies equivalent to a repudiation of the Government's good faith in the matter of the war securities, but business men, nevertheless, had come to know Mr. McAdoo fairly well and to assess his abilities with some degree of accuracy.

The times demand something more than a politician in the White House. Therefore, although Mr. McAdoo could scarcely be elected if nominated, his nomination would in itself be a menace. It is incumbent on each party to present as its candidate a man of such strength and inspiring such confidence that the triumph of either would not be ruinous.

In that grand march with irresponsibility, the primaries, where a small part of the voters have in different cases recorded their preference for the Presidency, there has been little that could possibly be interpreted as a mandate from the people in favor of a particular candidate. The California primary, it is true, brought out a large vote, because that State had been selected by treaty advocates as a battleground, but the verdict was for a "favorite son," and was influenced also very largely indeed by the intense feeling of the Californians in opposition to a League of Nations which might at any time jeopardize the supremacy of the white race in that romantic and rich State and in the whole West. The Japanese issue is a real one on the coast, and the people there do not want some foreign council telling them what their policies shall be in regard, say, to "picture brides."

While most of the active aspirants for the Republican nomination, therefore, would seem to have been eliminated by the ennui of the constituencies to which they appealed, the Johnson candidacy has undoubtedly shown strength on account of his sterling adherence to fundamental American principle in his refusal to compromise on the issue of subordination of American to foreign interests.

But there is one great question on which McAdoo and Johnson are tarred with the same stick. They have both been stung by the Government-ownership insect. Between them the country would have little choice and would be denied the opportunity to vote for a man dedicated to one of the most vital of American principles, namely, the encouragement of private enterprise and minimum interference by Government in private affairs. The clearer, therefore, the probable nomination of McAdoo becomes, the more certain the necessity of Chicago turning away from Johnson as a standard bearer. It would hardly do for the country to be dedicated to nationalization by the accident of personal politics.

It will be a great thing for America if each of the great conventions bursts from its swaddling clothes and does its own selecting. There is, we know, a fear on the part of some that a great radical undertow has started, and that no man can be elected who is not branded with economic fallacies that make pretty pictures. There are so many who insist that the people are fools. The fact is, of course, that more citizens are thinking seriously of Government this year than ever before. The conservative vote shows signs of being amazingly large. But it would be a calamity if, through an incorrect diagnosis of sentiment, the conventions made it impossible for that conservative vote to register itself.

One or the other of the conventions, if not both, must take its stand on the side of common sense and permit some millions of Americans next November to prove anew their devotion to the things which have made America great, and demonstrate beyond peradventure that a land of freedom does not mean a breeding place for class and tyranny, or socialism and anarchy.

WHY THIS ITCH TO GLORIFY RED RADICALS AND BESMIRCH THOSE WHO WOULD HOLD THEM IN CHECK?

WHEN this country was on the brink of war and German agents had for months been actively waging war against us, dynamiting bridges and factories, inciting strikes and engaging in a general illicit belligerency which was as cowardly as it was otherwise despicable, groups of pacifists and men whose intellectual processes had become thoroughly Chinafied took great delight in proclaiming that every revelation of fact was mere buncombe, and that every attempt to defend the peace and sovereignty of the American people was a high crime against freedom and constitutional government.

There is an organization which calls itself the National Popular Government League, with headquarters at Washington, and it is soliciting funds wherewith to distribute to editors, bishops, ministers and "other members of public opinion" a report denouncing the Attorney-General of the United States on the ground that he has introduced the spy system in America, and praising Louis F. Post, Assistant Secretary of Labor, as the great exponent of freedom and liberty because he has turned loose most of the persons the Department of Justice thought should be deported. "The attack on Louis F. Post," says the letter soliciting subscriptions, "precipitated a struggle which must warm the blood of every 1776 per cent American."

There is one supreme duty to which every American is by birth and tradition dedicated, and that is the preservation of the form of government to which our forefathers in blood gave birth on this continent. When Louis F. Post or anybody else communes with persons whose sole objective is the destruction of that form of government and the substitution therefor of some class dictatorship, he is as far away from Americanism as hell is from Heaven. The activities of Mr. Post have virtually nullified the national policy in regard to deportations. He seems to have been more concerned about turning loose anarchists than about protecting the people of this nation against violence.

If what the National Popular Government League were going to distribute were the truth, its energy might be applauded, but what it obviously intends to distribute is an ex parte statement which will take no cognizance of the astounding evidence in the possession of the Department of Justice relative to the part Lenin and Trotsky have taken in fomenting trouble in the United States.

The Attorney-General seems able to take care of himself, and we are not rushing in to his defense, but is it not about time for the public to commend those officials who try to administer the spirit of the laws, and who are not devoted to the discovery of flaws through which they can avoid enforcing the statutes?

MORE FARM LABOR THE SERIOUS CONCERN OF ALL.

WILL nothing short of famine itself arouse the country to the menace of a food shortage that confronts us? With shorter and still shorter hours of work, and larger and ever larger rates of pay, the industries are draining the farms of labor, until the problem of finding sufficient labor to plant and harvest the crops has become well-nigh overwhelming. All over the country, in fact, there are farmers who have quit, who have tired of the struggle to secure hands in requisite numbers, and who are either seeding their lands to grass, abandoning cultivation entirely, or selling out and moving away.

In winter wheat alone there is a decrease of 12,000,000

acres in the amount sown now as compared with the acreage of the year before. With the scarcity of labor on the farm, it will be impossible to make up this deficit by substituting some other food crop, and the inevitable consequence will be a food shortage this winter that will test the texture of our civilization.

Had the United States Department of Agriculture, had Mr. Hoover, had President Wilson given heed to the warnings of the *MANUFACTURERS RECORD*, heralded in season and out of season, based on a 35-year study of food production in this and other countries, it might have been possible to stir the country to the necessity of increased food production ere it was too late.

The only thing that now remains to be done is a vigorous attempt on the part of all authorities, of all industries, of all individuals to turn back the tide of migration from the farms to the cities and towns. Workmen in the industries must make up their minds to so increase production that it will not take two men to do what one man did in the years before the war. In no other way can so effective a move be made to help the farmers out and remedy the evil of depleted farm labor and inevitably higher prices and greater scarcity of food products.

Some months ago S. H. Gaitskill, a Florida breeder of cattle and hogs, propounded a query as to what the country would do if the farmers were to go on a strike. The possibilities of such a move seemed hardly likely then, for it had been taken for granted that the farmer would go on farming as a matter of course. Since then the burdens of the farmers have been so constantly growing and the demands of the striking laborites have been so exorbitant and so constant that plausibility is given to a renewed suggestion by Mr. Gaitskill that a strike of the farmers will surely come unless there is a change in conditions in the country and the town.

In the same mail that brought Mr. Gaitskill's letter comes a note from a South Dakota farmer, who announces that he has sold his thousand-acre farm because he could make only 2½ per cent on his investment, and he is going back to his trade as a mechanic.

These are signs of the times.

In his letter Mr. Gaitskill says:

"Perhaps you will remember my suggesting to you that a possible remedy for labor troubles might be a farmers' strike, a determination among farmers to produce for their own needs and let the labor unions get hungry. It almost begins to look as if this was being forced upon the farmers by the labor unions. Short hours and high wages have taken and are taking labor away from the farms; consequently, the farmers are forced to cut down their operations. From all over the United States come reports of less crops being planted because labor cannot be had. This will amount to the same as a farmers' strike, and unless there is a change it is coming. The farmer cannot pay wages asked to grow crops to make meat at present prices for cattle and hogs, and all hogs and cattle, in excess of what the farmer and his family can care for, will be sent to market. This will so reduce the supply of breeding stuff that it will be years before a full supply of meat can be produced, and the labor union can say: 'This is our work!'"

"I have hoped for a return to sanity, but it now looks as if it will take a flat knock-down to wake the country up."

"ALL ACCOMMODATIONS FILLED!"

THE Huron, formerly the German liner Friedrich der Grosse, was made over for passenger trade after serving as an American transport during the World War. She will sail next Saturday for Rio De Janeiro and Buenos Aires with all of her cabin accommodations filled.—News Dispatch.

Wasn't it the Shipping Board which stated a few months ago that it could not develop the South American trade because people would not travel on a prohibition vessel? Tut, tut!

They Filibuster in Senate to Break the Sword in America's Scabbard

WHILE the dye bill was being talked to sleep in the Senate and the encyclopedias were being invoked for words and phrases with which to outrage public time, Senator Kenyon took occasion to read a letter which had been sent to Senator Moses by Charles K. Weston, who is employed by the Du Ponts, asking that statesman to explain how it was that he spent an evening in Wilmington propounding to the public the great merits of General Wood as an exponent of preparedness, while he himself, down in Washington, was devoting his every effort to defeat of the pending dye bill. And Senator Kenyon added: "I will say further that, in line with the publicity campaign which the Du Pont people are carrying on for this bill, there is an article in the MANUFACTURERS RECORD of April 22—and bear in mind the letter to the Senator is dated April 16—an article entitled 'General Wood is for Preparedness, but His Chief Backer is Strangling the Dye Bill.' And then follows an assault on the Senator for his opposition to the bill."

The MANUFACTURERS RECORD, of course, never heard of the Weston letter until Senator Kenyon read it in the Senate; otherwise it would have been printed. But it must have been obvious to Senator Moses himself days ago that he could hardly expect to be shouting from the housetops the merits of General Wood as "the great preparer," while he himself, in the Senate, had his fingers on the throat of the greatest of all preparedness measures. One cannot devote his remotest powers of ingenuity to the defeat of a preparedness bill and simultaneously ask the votes of people in favor of a man because he believes in preparedness without inviting and getting criticism. Public men cannot "tote water" on both shoulders these days. The people are too intelligent. They may like platitudes, but they test a man by what he does. Doubtless some thousands of people had been asking the puzzle editors to explain the Moses phenomenon long before we called attention to it. We said what many were thinking, and events have more than justified both the title of our editorial of April 22 and the facts related therein. The only difference is that then Senator Moses, we judged, was only about to strangle the dye bill, whereas since it has been rocked and brickbatted to sleep by as brazen a talk attack as ever characterized a Senate filibuster. It does not make any difference whether Senator Moses was present during this verbal storm or not. While he was away, it was known that Senator Thomas could and would talk.

Let us see where we stand. There are two great schools of economic thought in this country, and they have operated the one under the Republican banner and the other under the Democratic. The latter has been for a tariff for revenue only. It has never sought to protect any industry. It is against such protection by tradition and by principle. Nevertheless, the great war taught some lessons, and it taught them thoroughly. Therefore, a Democratic President of the United States in two separate messages to Congress declared that the absolute protection and upbuilding of the dye industry in the United States was essential to the future well-being and safety of the nation. Thus spoke one of the parties, the one that might naturally have opposed the pending dye bill.

There has not been, on the other hand, one single Republican of whom we have heard, including Senator Moses, who has ventured to suggest that the dye industry should not be protected; not one in public office who is not dedicated by his adherence to Republicanism to vote for such protection. Neither Senator Moses nor any one of the Republican Senators associated with him would undertake for a moment to question the propriety of protection. There is a division, then, solely as to method.

Now consider the subtlety of the few textile men who protest against the dye bill in its Senate form. They say they want to protect the industry, but they insist on protecting it in such a way that they can buy German dyes. They are all for pouring water on the fire in the open, but they are pumping oil on it from underneath. "We are going to buy our dyes where we can get them cheapest now, and do not give a damn where they come from." And the gentlemen who talk that way scarcely need additional profits. If they do not "give a damn" whether this country is prepared or not, their patriotism begins and ends in a ledger. Fortunately, a great majority of the textile interests of the United States do favor absolute protection for the native dye industry. Their patriotism is not in their pocketbooks.

There are some essential dyes which America cannot yet make. It is the German system to refuse to sell these essentials to dye users unless they agree to buy also all their other dyes from German manufacturers. That is the way the cartel works, the cartel that is employing in its dye-making establishments today more workmen than ever before in its history, even though Senators who ought to be better informed do get up and say that the Germans are dye paupers and need not be feared. If they are not going to have dyes to sell, why are these Americans who cry out against the dye bill so anxious to have a tariff that will let German dyes in? Let those who filibuster answer.

Senator Thomas is fighting the dye bill because as a Democrat he conscientiously believes that we ought to bring into this country any German or other goods that we can buy cheap. He cannot get beyond the economics of the situation. Senator Moses and his associates profess to fear that the protective tariff is endangered by the bill. They cannot get beyond the economics of the situation. Some textile interests think they can make a little more money now by buying German dyes, when, owing to the exchange, labor can be bought in Germany for 16 cents a day, and they have a plan in view also to revive Schedule K, which they think may be helped if they emasculate the dye bill. So, among the opponents of the bill, there is not to be found one who has vision enough, or foresight enough, or, in some cases, unselfishness enough, to see that the question is not an economic one at all, but has long ago been taken out of that sphere by the exigencies of national safety. Thomas A. Edison has stated the case clearly—a protective tariff alone would merely assure the rehabilitation of German-dye monopoly in America.

The Germans today are making synthetic rubber. Nobody knows what they will be making tomorrow. They are a nation of chemists, because chemistry lifted them in a few short

years from a second-rate nation into world authority. Had they waited a few years their chemical superiority would have given them military mastery of the world. If this nation permits its own dye industry to be killed and pours American money into German coffers to be used to subsidize chemical effort there, we as a people will be in fact financing the up-building of a machine for our own destruction. There is no doubt about that.

World peace has become a race of test tubes. We may tax ourselves for billions with which to build and maintain our armies and our navies; we may form covenants and write on paper charters of accommodation, but some Edison will arise in a laboratory and dictate national formulas. Will he be an American? Not if through sheer stupidity we prevent the likelihood of there being tools here with which such a man can work. The supreme discovery might lead to the enslavement of civilization or to universal peace. It depends which nation is the discoverer. But the one sure thing that we do know is that our armament must be up to date. It would be murder to send a fleet with eighteenth century guns against a modern armada. It would be worse than murder to put twenty years hence a nation undeveloped chemically against a nation fully so developed. The military triumphs of the future will be won in the laboratories of the nation. The glory of war is slipping into the romance of creative chemistry.

Five years ago we had become dependent on Germany for essential synthetic medicines. We were threatened during the war, for instance, with a total lack of that supreme corrective, salvarsan. There is in the making now, in American dye establishments, a specific for influenza. In a new war, what new dread disease may decide the issue, as the one side or the other evolves a chemical cure?

Mr. Bryan, like Pompey, might stamp his foot to bring a million armed men into military organization and efficiency, but twenty Bryans might stamp their feet for twenty years and bring no expert chemical corps into existence. You cannot create a scientific personnel of that sort overnight. You cannot groove mental processes except by years of effort.

None would expect France, say, to take up baseball and be able to compete successfully at once with an American nine. Our lads have known the game from infancy. But by such enthusiasm, such energy, such enterprise as Americans have shown in the last few years we can get on an even footing with Germany in dye chemistry if Uncle Sam will just hold the line a bit longer. Those brave men at the front in France held until the American army could be made ready. Let Congress hold fast now on the dye line until the chemists can be ready.

If there were the power in us to tell this whole American people the truth of the present situation; if we could picture for them fully how the experts of army and navy, the scientific bodies, the most of the textile interests themselves, have appeared in numbers before the Senate committee at the hearings, and how absolutely they demonstrated the necessity of the pending measure; if we could visualize even to a faint resemblance of the fact the ingenuity and guile by which the German cartel seeks now to have America disarm herself; if we could make the American people see the utter heartless-

ness of the men who, knowing they are in a minority, have filibustered to prevent this dye bill coming to a vote; if we could show, as ought to be shown, what interests have really been doing malicious lobbying, it is beyond question that the public would rise in their wrath and compel the obstructionists to get out of the way and permit an American Senate to vote for this purely American measure.

But the cartel is old in guile. None but interests powerful financially could ever have undertaken to combat it; because those interests are powerful financially, the cartel seeks to arouse against them the public hostility to "trusts." So does the greatest of all trusts work to hamstring American defense. How vain it is to have men crying out that the dye industry is a monopoly, and therefore the bill must not pass, while they declare themselves ready, nevertheless, to vote that so-called monopoly protection in some other form! They know it is not a monopoly; know that the bill would prevent a monopoly; know that it will mean eventually lower instead of higher prices; know that it will mean the saving annually of millions in coal by-products now going to waste; know that it is an industry absolutely essential to the future safety of the nation; and yet they hide themselves in sophistry and hope thereby to excuse themselves to the American people. Monopoly! If the American dye industry is destroyed, who other than the German cartel will enjoy a complete monopoly and employ it ruthlessly? The very argument is monstrous. But those who know to what depths that same German monopoly, now more closely knit than ever, stooped before the war need not be surprised at the depth of its present maliciousness.

God grant that this nation may never again be caught unprepared, may never again have to squander blood and money to repair the fearful and awful lack of vision of the statesmen. God grant that in the next war we may not have to send our youth with ancient muskets against chemical guns. God grant we may not have to employ the usual artillery against the destructiveness of harnessed atomic power.

We hold no brief for the Du Pont interests or any other interests which may have undertaken to make this nation independent in creative chemistry. They can probably take care of themselves. They could even lose their entire investment, we imagine, without going bankrupt. Our concern is not for them. But in so far as they represent a brave and courageous effort to do a necessary thing, an essential thing, for the safety of this nation; in so far as they devote themselves to an effort to break the shackles which the dye cartel formerly fastened on America, then we are for them with all our heart and power, and so must every good American be. We, for instance, are among those who think that it was a good thing that the first Du Pont came to this country. Perry at Lake Erie would otherwise have had no powder. So we believe that all those who are engaged now in building up the chemical industry are "bringing powder to America." They ought to be encouraged, they ought to be supported, they ought to be allowed to do this big American thing which they are trying to do.

The sidetracking of the dye bill by a filibuster in the Senate was a disgrace to that body. The bill ought to be taken up again in a hurry and passed, even if cloture must be invoked. And no man should be nominated for President on

either of the great party tickets until he has put himself absolutely on record in regard to dye legislation. There are two things the country must have, and no man should be elected President who does not favor in detail both of them. One is the dye industry, and the other is the merchant marine.

A SIGNIFICANT APPOINTMENT TO THE INTER-STATE COMMERCE COMMISSION.

THE appointment of Mark W. Potter, railroad executive, to a place on the Interstate Commerce Commission is indeed cause for congratulation. Mr. Potter's name has been sent to the Senate by the President, and he has advised the MANUFACTURERS RECORD that he will accept the appointment. We congratulate the country and we congratulate President Wilson on this admirable selection. It is a refreshing and reassuring contrast to some other appointments to high places that have been made in recent years. Indeed, throughout the entire Administration it would be difficult to point to a choice so fitting as that of Mr. Potter for this important post.

It is a gratifying manifestation of a change in attitude towards the railroads when a railroad man himself, having intimate knowledge of railroad operations, is appointed to membership in the Interstate Commerce Commission. It seems a reasonable inference that a record for railroad-baiting is not hereafter to be the chief recommendation for membership in the railroad rate-making body, and the presence there of such a man as Mr. Potter will be a strong assurance that constructive policies may be expected from the Commission from now on.

Never in its history has the Interstate Commerce Commission needed men of broad vision and real ability in its membership as it does today. America's railroads, forming by far the greatest transportation system in the world, are in desperate need of rehabilitation following the emergency use made of them by the Government during the war. There is an appalling shortage of freight cars, of locomotives, of passenger coaches, of rails and of terminal facilities, and with present rates for freight and passenger service it is impossible for the owners, to whom they have been but recently restored, to earn the vast sums required for their rehabilitation. Without greater revenues it is impossible for them even to earn a return sufficient to establish a credit basis for borrowing the funds they require. There cannot come the fullest nationwide prosperity and growth until the transportation facilities of the country are put on a sound footing, and the crux of the whole situation lies in the ability of the rate-making body, the Interstate Commerce Commission, to apprehend and to properly appraise the broad national necessities now and to formulate adjustments with reference to permanent future development.

Mark Potter is the type of man the situation requires. He comes from the people, having been born on a farm in the Middle West some half a century ago. He has worked his way to a leading position as a lawyer in New York, being at this time a member of the firm of Hornblower, Miller, Garrison and Potter. As president of the Carolina, Clinchfield & Ohio Railroad Co. he built a remarkable line of road through passes of the Appalachian Mountains from the breaks of the

Big Sandy to Spartanburg, S. C. It is a phenomenally low-grade road, and is thus an economical coal carrier for the rich fields it traverses. It opened up sections rich in minerals of various kinds, and along the route there have been built up industrial cities of ever-increasing importance. Of broad vision, great practical sense and unbounded zeal, Mr. Potter has made of the Clinchfield an important carrier and a conspicuous developer.

As an outlet to his energies, Mr. Potter has also found time to undertake the drainage and development of a great tract of land in the eastern section of North Carolina. A 45,000-acre tract is being drained, cleared and made tillable at the rate of 5000 to 10,000 acres a year. A portion of the holdings will be retained by the company for farming and stock-raising operations. The balance will be marketed with the prime object of contributing to the total available acreage of the country required to meet the increased demand for food and feed.

Other farming operations have been successfully undertaken by Mr. Potter in line with what might be termed a passion for development—a dominating impulse to turn national resources to a good account and for the public benefit.

But railroading and farming are but a part of the many activities of the man. He has been constantly and intimately identified with large affairs through his practice as a great corporation lawyer. His experience is uncommonly broad, his vision is more than nation-wide, and to the duties of Interstate Commerce Commissioner he will bring an equipment rarely found in officeholders, an understanding hardly surpassed in business executives, and a knowledge of all the intricacies of railroad rates and railroad operations such as no member of the Interstate Commerce Commission has had before.

Mr. Potter has laid the country under heavy obligations in accepting a position which promises so large a public benefit at the cost of great personal sacrifice. He will divest himself, of course, of his corporate activities, and will thus absolutely represent and serve the public interest without any bias for the railroads. His knowledge of railroads and corporate affairs will be invaluable, but he will become pre-eminently a public servant. That is Mr. Potter's way.

COST OF POTATOES.

[Girard, in the Philadelphia Press.]

Thousands of housekeepers in Philadelphia pay \$6.40 a bushel for potatoes.

Chase a potato's history from the hour it lands upon your dinner plate, then worth nearly three times its weight in wheat, back to the day it came from Farmer Cornfassel's field and you will find this to be true:

The biggest profit on that potato was not made by the man who produced it and not by the great railroad that hauled it 200 miles to market, and not by the rich produce merchant in the city, but by the little store around the corner, to which you paid 40 cents for a quarter of a peck.

The farmer who raised the potato and the railroad which carried it to you earned only a modest profit—neither of them over 8 or 10 per cent.

The corner grocer got not less than 50 per cent on the price he paid the wholesaler.

That's a fair sample of the stuff that misleads the public. Potatoes have been selling on the ground in Florida, the great potato center, for several weeks to wholesale buyers at from \$10 to \$20 a barrel, according to grade, or, say, from \$3 to \$4 a bushel to \$6 or \$7 a bushel. With four pecks to a bushel, these potatoes have been bringing the Florida grower about \$1 to \$1.50 a peck, and on top of this the wholesale buyer pays the freight and distributes to the retailer, and the latter to the consumer. And yet such stuff as this extract from the Philadelphia paper goes the rounds and misleads the public.

THE TONNAGE OF STEEL RAIL PRODUCTION.

THE American Iron and Steel Institute reports the production of steel rails in the United States in 1919 at 2,203,843 gross tons, this comparing with 2,540,892 tons in 1918 and 2,944,161 tons in 1917.

Publication of these statistics prompts reflection upon the great fluctuations that have occurred in rail production in the United States. Generally speaking, the production of steel in the United States has increased rapidly, there having been only 16 years in the past 50 in which the production of steel did not make a new record, only 16 years failing to equal the best tonnage of any previous year, eight of those "off" years having been in the past quarter century, with eight in the previous quarter. It has not been so with rails, which have shown great slumps in demand.

The earliest statistics of steel-rail production are for the year 1867, when 2277 tons of Bessemer steel rails were produced, the production of wrought-iron rails in that year having been 410,319 tons. Practically the only "steel" previously made was crucible steel, for use in cases where a temper was required. The Bessemer steel-making process commended itself strongly for rail purposes, because with it a hard steel could be made at a low cost. Bessemer steel, therefore, had its first vogue with rails, and it was not until long afterwards that any considerable tonnages of "soft" or "mild" steel were produced.

The rise of the Bessemer rail was so rapid that while only 2277 tons were produced in 1867, less than 1 per cent as much as the tonnage of iron rails in the same year, ten years later the Bessemer rail tonnage exceeded the iron-rail tonnage, the figures being 385,865 tons and 296,911 tons, respectively, making a total rail output in 1877 of 682,776 tons. Four years later the Bessemer rail output ran into seven figures, while in two years more the iron-rail tonnage dropped to five figures.

The replacement of the Bessemer rail by the open-hearth, which has required only a few years, makes the early history of the Bessemer steel process all the more interesting at this time. It was for making rails that the Bessemer process was introduced. For years Bessemer steel was used for scarcely anything else, and as late as 1890 more Bessemer steel went into rails than into all other steel products taken together. The wire nail made its real advent in 1886, Bessemer steel being its natural material, and the wire nail soon pushed out the cut nail, which had been made chiefly from wrought iron. At about the same time it was discovered that Bessemer steel could be welded for pipe making, and Bessemer steel began to shove wrought iron out for that purpose. The year 1892 may be picked out as the year in which the puddling process, making wrought iron, began definitely to decline, yielding to steel.

It was in 1911 that the open-hearth rail passed the Bessemer rail, and it passed at a rapid pace. Thus one has this history: That the Bessemer steel-making process appeared in 1867, was used almost exclusively for making rails for 20 years, then was used for making other steel products also for a trifle more than 20 years longer, then yielded to open-hearth for rail manufacture, but for various other steel products retained its vogue, particularly for wire nails, pipe, merchant bars and tinplate.

The supplanting of the Bessemer rail by the open-hearth is shown succinctly by the following presentation of production in gross tons:

	Bessemer.	Open-hearth.
1908.....	3,791,459	186,413
1910.....	1,884,442	1,751,359
1911.....	1,053,420	1,676,923
1919.....	214,121	1,893,250

In 1919 there was also produced 50 tons of electric steel rails and 96,422 tons of "rerolled" rails, made from old steel rails.

The next interesting point in the statistical history of rails was that in 1887 a tonnage output was reached, 2,139,640 tons, that stood as the record for 12 long years. The rail demand was very largely for the building of new lines, although the rapid wear of the remaining iron rails in service produced a fairly heavy demand for replacement purposes. In addition to the large production of 1887, there were imports of 137,830 tons of rails, with exports of only 549 tons, making the visible supply for the year 1887 no less than 2,276,921 tons. It is not surprising, therefore, to find that the year 1887 holds the record to date in construction of new railroad, 12,984 miles having been built in that year. The expansion was too rapid, and light earnings followed, the receiverships that were so common in the early 1890s being due partly to physical conditions and partly to stock watering.

The rail production record of 2,139,640 tons in 1887 was broken in 1899, 12 years later, by a production of 2,272,700 tons, but the consumption record was not broken then, for while 137,830 tons were imported in 1887, in 1899 277,714 tons were exported, 2134 tons being imported. In 1901, however, the consumption record was broken, production having increased further.

For several years afterwards the production of rails increased, until in 1906 a record was made that stands to this day, 3,977,887 tons of rails being produced, with 4943 tons imported and 328,036 tons exported, making an apparent consumption of 3,654,794 tons.

The heavy rail demand of 1906, however, was not due chiefly to the building of new road, as had been the case with the heavy demand of 1887, since only 5643 miles of new road were built in 1906—less than half the mileage of 1887. The chief cause of the heavy rail demand in 1906 and contiguous years was the heavy rolling stock that had lately been introduced, which played havoc with steel rails of 75 pounds per yard and lighter sections, as well as with some iron rails still remaining. It was a period of replacing light rails with heavy rails. If the rails had all been of section heavy enough for the modern rolling stock, the annual wear would have required less than a million tons of rails for replacements. Now the traffic is so much heavier that about one and a half million tons a year are required as minimum to make up for wear. It is not a matter of mileage of track, but of quantity of traffic. On a general average, the revenue and non-revenue freight-ton mileage of the country is between 400,000,000 and 500,000,000 a year. For a long time this total has been doubling about once every 12 years. Of late the capacity of the railroads has not been increasing rapidly enough to increase the service performed in this ratio, and the great problem now is to increase this capacity by increasing the efficiency of operation and by enlarging the physical facilities.

Of the 2,203,843 tons of rails produced in 1919, 12 per cent was in light rails, under 45 pounds per yard, for various industrial uses; 22.5 per cent was in rails 45 pounds, but under 85 pounds, for minor steam railroad service; 43.8 per cent was in 85 pounds, but under 100 pounds, and 21.7 per cent was in rails weighing 100 pounds and over per yard. This heavy rail is the rail of the future for the important roads. For years past there has been an issue between the railroad engineers and the rail mills, the former arguing for better texture of rails, the latter for the use of heavier sections.

Mexico's Progressive Revolution and Its Significance to Our Own Country

OUR appraisal of the character of the revolution that has swept Mexico has been justified by the events. The one discordant circumstance reported remains unconfirmed. This was an outbreak of the old spirit of individual self-assertion by Gen. Pablo Gonzales, who withdrew his support from Carranza and was said to have proclaimed an independent revolution in the important State and city of Puebla. Later, it is said that he co-operated with Obregon in taking Mexico City. Gonzales is a man of the old school, and might possibly possess reactionary tendencies. Being in no sense a man of such wide popularity as the others prominent in the recent uprising, and not being endowed with the qualities of a national leader, opposition on his part would hardly affect the final result.

The press of this country has recognized in the secession of State after State a character distinct from the general preconception of Mexican revolutions. It has progressed in such a manner as to demonstrate convincingly that the regime of Carranza was in no respect upheld by popular mandate. It shows that the spirit of the Mexican people was completely out of accord with the attitude of the Coahuila dictator, whose acts have caused so much concern for the past five years, and whose rule has been stained with the blood of so many murdered American and also Mexican citizens. It must be recalled at this moment of retribution for Carranza that he destroyed hundreds of the ablest men of his own country because they dared to use the constitutional privileges he had promised them to oppose his unjust and illegal administration of affairs.

Carranza was, from the beginning of the great European war, stoutly and aggressively pro-German. He disbelieved in our manhood, because we had displayed a weak and cringing deference to his haughty defiance of our admonitions and protests, and he was persuaded that Germany would win. This, however, was not all. He was personally hostile to America, and he sought by every means in his power to array the whole of Latin-America against us. In framing policies calculated to injure us he cast away the greatest opportunity for the amassing of wealth that was ever presented to the Mexican people. By aligning himself with the Allies and accepting the cordial co-operation of the people of the United States, Mexico could have produced more oil, and a vast quantity of minerals, sisal hemp, cotton and foodstuffs, that would have left her one of the rich nations of the world. Instead of that, by the obstinate obsession of her Chief Magistrate, she has remained poor, has failed to possess herself of the capital she might have acquired for the development of her resources, and has come through the war friendless and distrusted.

The revolution that seems now swiftly coming to a successful conclusion, however, proves that the acts of the governing clique dominated by Carranza lacked the support of the great body of the Mexican people themselves, and the accession to power of the new leaders will apparently bring a reversal of policy in many important details of the international relations of the country. As we have previously observed, these men represent the best element in Mexico. They may not be pro-American, and we do not care for that. We are not pro-French, nor pro-English, for it is none of our business what the French or English or any other nation chooses to do so long as it does not injuriously interfere with our national life and the peaceful conduct of our business in foreign parts. On the other hand, we are certain that this new group of Mexican patriots will not be anti-American, and that ensures friendly commerce, friendly co-operation and mutual helpful-

ness. More than that, no representative American desires, or should desire.

Gen. Alvaro Obregon, who at this writing has just made himself master of Mexico City, has been too remote from the border and too cut off from communication to give an expression of his attitude toward this country, but we know that he was one of the few prominent men in Mexico who displayed a purpose to aid the Allied cause during the war. He offered such resources as he could command, especially agricultural products, at a time when our national food problem was of paramount concern. That act reveals a spirit that is in violent contrast with Carranza and his pro-German minions.

Gen. P. Elias Calles of Sonora has always generously protected American mining operations in his State, and no one could wish for more cordial behavior than he has observed. He is a Mexican who believes that the resources of his country belong by inheritance to his own people, which does not mean that they, or he, resent the introduction of American capital, properly safeguarded and protected, for their further development. He has manifested special anxiety so to conduct the revolution as not to compromise himself in the eyes of the Administration at Washington, nor to offend the opinions of the American public. A conspicuous example of this is revealed in his hesitancy to accept the proffered co-operation of Villa. In this he is to be commended. Villa has been given a bad name, and the cause of Calles and Obregon would undoubtedly have suffered in the estimation of the American public had he been instantly welcomed as a brother in arms of the Revolutionists.

On the other hand, we must not fail to recognize the virtue of expediency in doing what will tend to promote order and progress in Mexico. If the new regime in Mexico does not establish a stable government, it will fall of its higher purpose. Unless Villa is rationally cared for, he will continue, from force of circumstances, to harass the State of Chihuahua. It must be remembered that he was never a bandit from choice. Driven to outlawry for an act of resentment at the disgrace to which one of his family was subjected by a man of powerful connections in the days of Diaz, he seized the first opportunity presented to return to civilization when Madero needed the help of forceful men. The better qualities in the man appealed to us and he was favored in many ways, finally acquiring the playful title of "Our Pet Bandit." If, for reasons of State, he is again accepted by the present revolution, we must recall that he was hurled back into the life of a guerrilla chieftain through the act of our own Government in recognizing Carranza, after having appealed to all the factional leaders to hold a council in a spirit of compromise, an invitation which Villa instantly accepted, but to which Carranza sullenly refused a reply. Since that time Carranza has systematically put the blame for every misdeed committed against Americans in Chihuahua and along the border upon Villa's shoulders. In fairness it must be stated that no proof that he was implicated in these occurrences has ever been presented. "Give the devil his due." Finally, it is to be recorded in his honor that without making conditions he has laid down his arms and turned his forces over to Gen. J. G. Escobar, at the same time notifying the managers of the Mexican Central Railway that it will not be necessary for passenger trains to carry a military escort any longer. So, once more he takes advantage of freedom from personal enemies to return to civil life.

It is fortunate that our Administration has so far done nothing that would incur the enmity of the leaders of the present insurrection. The appeal for permission to send Carrancista troops through our territory to attack the State

of Sonora was prevented by the determined opposition of the Governors of Texas and Arizona, supported by the most influential citizens of those States. It is to be assumed that residents of the border are better judges of their neighbors across the line than men in Washington, remote from the scene of action. It is to be hoped that we will never again commit the indiscretion of lending preferential aid and comfort to factions in a neighboring Republic.

The Mexicans want only to be let alone in the settling of their domestic problems, and they have a right to that as long as they respect their treaty obligations to our own people. We have a sorry showing of murder and pillage for our interference in helping to establish Carranza in power. No so-called "bandits" have ever done a fraction of the damage to our interests that we have suffered at the hands of this creature of our misguided policies.

It is to be hoped that we will observe the customary procedure in international law, and recognize without quibbling a de facto government in Mexico as soon as such a government is firmly established. If we accept the facts and let our own theories go, we will win the favor of all parties.

Our own observation does not lead us to share a very common belief that the Mexicans are incapable of self-government. Mexico settled down quietly after the popular uprising that swept Madero into the Presidency. The election that confirmed him in power was conducted fairly and honestly. The people frankly doubted his ability, but he had been the leader of a popular revolt against an administration that had grown hopelessly corrupt through greed and graft. There was no other able man in the public eye of Mexico at that time who could take the post. When he forfeited the respect of the people by a singularly tactless act of favoritism toward his brother, he brought swift ruin upon himself. The legal shifts that put another in power did not concern us, and our meddling precipitated trouble that ended in creating a great deal of unnecessary hostility, from which we and Mexico have suffered for years. This lesson should be taken seriously to heart.

The next attempt at establishing a government in Mexico should find us fair and distinctly non-partisan. The new men are friendly to us. It behooves us so to act that they may not become otherwise.

TO CURTAIL ROAD BUILDING WOULD BE A NATIONAL CALAMITY.

IN a letter which Daniel Willard, president of the Baltimore & Ohio Railroad, wrote Secretary of War Baker in reference to the curtailment of non-essential industries in order to divert labor to the farms, it is stated that Mr. Willard included road building among the non-essential industries. If this is an accurate presentation of Mr. Willard's attitude, it is amazing that a man of his knowledge of transportation matters can take so narrow a view on the vital importance of road building. It would be equally as appropriate to suggest the suspension of railroad work of all kinds. The suggestion for the curtailment of highway construction comes with poor grace from a railroad man when every intelligent man knows that farmers need good highways and that without improved roads and motor trucks the whole transportation system of the country would collapse.

Those who kept in touch with the remarkable services performed by motor trucks operating over highways during the war period and the days of railroad congestion and the recent railroad strike, all realize that highway transportation proved itself a most helpful auxiliary to the railroads. With the farmer being urged to increase production to the utmost extent, he will need good roads as never before for the movement of his products to the market, and for this reason alone

it is vitally important that road building should not in the least be interfered with, but should, on the other hand, be stimulated to the greatest possible degree as one of the most essential undertakings in the country.

Everyone knows that the railroads today are utterly incapable of meeting the present-day traffic needs. The one salvation in this transportation crisis is going to be good roads and the motor truck, and it may be truthfully said that the whole fabric of our transportation system depends most vitally upon giving the freest possible rein to the utilization of motor trucks and as quickly as possible improving the highways so they can operate to the greatest efficiency in every section of the land.

The motor truck is demonstrating that it has earned a permanent place as one of the fundamental means of transportation. Not only is it serving the farmer in moving his products quickly to the market, but it is also taking the place of the railroad for short-haul deliveries, and so important a position has it come to occupy that the Chamber of Commerce of the United States at its recent annual meeting adopted a resolution urging each community in the land to collect information of available supplies of necessities, trucks and other means of transportation that could be called to use, and of men who would be willing to respond and serve for patriotic motives in times of great emergency. This great business organization undoubtedly had in mind both the inability of the railroads to meet traffic demands and the possibility of a railroad strike, and it looks to the highways and the motor truck to meet the situation.

In the light of all these facts, it is difficult to understand how a man who has devoted his life to transportation could take such a narrow view of the importance of highways and fail to see the vital relation which good roads bear to increased farm production.

As to the adaptability of road building labor to farming, it is a known fact that very little of this labor is suitable for farm work. Indeed, practically the only labor that would be available for the farms would be the common labor that is needed in the harvesting season; at other times of the year in preparing the land, planting and cultivating and caring for the crops, skilled farm workers are required and labor such as is used in road building would be practically unfit for farm work. It is not to be expected, therefore, that the curtailment of highway construction, except for the short harvesting period, would be of any value whatever to the farmer, while the failure to build good roads for him would discourage and hamper him to a serious extent.

Whatever action may be taken by the Council of National Defense in discussing Mr. Willard's proposal, it would be hard to imagine that any thoughtful consideration would be given to the question of limiting road building in the slightest degree. Indeed, the Council could go to the other extreme and urge that every possible attention be given to this important work and that every assistance be rendered, especially during the summer months, so that the great road program, for which hundreds of millions of dollars are available, can be carried forward to the fullest extent possible.

May His Hope Be Fulfilled.

T. L. DOWLING, Secretary-Treasurer, Dowling Bros., Ltd., Gloster, Louisiana.—I will thank you to send the MANUFACTURERS RECORD to my brother, Dr. H. B. Dowling, Ozark, Ala., for three months, beginning with your issue of the 22d inst., and send him the subscription bill for same.

I have been reading your journal for about three months, and consider it the very best publication now current in the whole United States. You are exerting a great influence along right lines, and the good that you are doing will live long after you have ceased to speak to us in the forceful terms of your journal. May you live long to proclaim these good things.

The Federal Reserve Board Is Itself Responsible for the Low Price of Liberty Bonds, Says Senator Owen

THIS Government borrowed, roughly, \$25,000,000,000 with which to win the war. Great sums were squandered, necessarily or not, in quick preparedness. The savings of past and future were spent in the space of a few short months. Payment was made not on the intrinsic worth of the things purchased, but in accordance with the instant necessity for them. To the naked man a suit of clothes is worth what the seller demands. The famished have not time to ask prices.

This vast debt, then, was contracted under what bankers are apt to call inflation. It took, say, a billion dollars to buy a half a billion dollars' worth of service. Companies have been known to sell their bonds at 50 cents on the dollar and buy them back at par. But it is a strange thing for the richest Government on the face of the whole earth, the richest that ever was on the face of the earth within the knowledge of recorded history, to borrow the people's money with which to pay the prices of exigency, then so to administer the law as to force a depreciation of 15 per cent in those securities and, finally, so to manipulate matters that the taxpayers have to pay the whole debt back in "double dollars."

The intricacies of finance are beyond the comprehension of ordinary men, but trickery is trickery, no matter how vast its scope, and ordinary financial morality is quite as requisite on the part of the Government as on the part of the meanest beggar on the streets.

Inflation! Governor Harding estimates that the profits of the Reserve banks this year will amount to more than their capital—to more, in gross, than one hundred millions. That is inflation, the kind of inflation which Senator Owen so aptly dubs "the inflation of rates." The Board is profiteering from its usurious practices. It is coining repudiation. Out West they used to salt mines. Holders of Liberty bonds begin to wonder if that was such a nefarious practice, after all.

It is a pity that Senator Owen has not released for publication his entire correspondence with Governor Harding, a reply to which was given publicly. The Oklahoman was one of the architects of the Reserve system, perhaps the chief of the architects. There is no doubt on his part about what has happened. It is not the law that is at fault, he says, and additional legislation is not required. The whole fault lies in the administration of the law and the adoption of policies by the Board which, the Senator is convinced, if persisted in, will absolutely negate the possibility of the war bonds ever going back to parity. Instead, they must drop and drop and drop.

There are bankers who have ridiculed their clients who were holding war bonds yielding less than 5 per cent, and yet came to them to borrow money at 7 per cent and 8 per cent. "You are foolish business men," said these bankers. "Throw your bonds on the market and get what you can for them. Your losses will be less now than later." Think of it! But yesterday the word of the Treasury was the world's best bond, but who today can do it reverence?

It is the Government which has poured filth on its own securities and branded them with bastardy. At the Treasury they say that nothing can be done or should be done. And yet the Treasury has been deluged with letters from all over the country, begging that it do something to re-establish credit. How can it re-establish credit in bonds when it issues its own fiats of what rates of interest must be, inflating them, and making its own bonds look like country cousins in comparison with their rich city relatives?

Nor is the Federal Reserve Board content to suck dry the national honor in this way. It must needs also insult repu-

table business men if they venture to protest. When they go before a committee of Congress to voice their dislike of certain practices of the Board, President Harding is reported to have amused himself by likening their honorable efforts to fleas biting a dog. One is almost tempted to ask what kind of dog has the most fleas?

Not in all the world's history has there been such a demand for capital as there now is. Never have there been such opportunities profitably to employ capital for the succor of the world. Never has it been so much the duty of those responsible for financial policy to make it possible for enterprise to secure funds. But because, perchance, half the world has been taking a 100 per cent seigniorage and getting money from printing presses, this nation, of the soundness of whose currency there has not been even a suspicion, must, we are told, lock a large part of its resources in a vault and bury them, else the people may become too prosperous. Why, every ounce of credit she can get England is pouring into the investment vacua of the world. No wonder she says she already has taken a mortgage on the oil supplies of the future! No wonder she has the trade of most of Europe already fastened to her with golden chains! They are merchants, those Englishmen, who know how to use wealth when they get it, and are not afraid, forsooth, if opportunity, having been well received the first time, is a recurrent visitor. If they have eyes, they use them. We only are afraid.

Already a credit contraction of more than a billion dollars in national bank deposits has been effected. It is possible for the Federal Reserve Board to keep contracting and contracting the national wealth, in terms of dollars, tighter and tighter and tighter, but the debt, measured in dollars, does not change. Is it a commendable thing arbitrarily to raise the ratio of debt to capital by such a flatism? The answer is obvious.

Who is it who thinks it a good thing to force us to pay 12,000,000,000 bushels of wheat and 100,000,000 bales of cotton in extinguishment of the national debt instead of paying it with 6,000,000,000 bushels of wheat and 50,000,000 bales of cotton? The Federal Reserve Board. It is out to force commodity prices down so that producers will get, say, half for their products that they now get. They propose to double the national debt in terms of products.

It is more, therefore, than a mere question of depressing war bonds, inexcusable and humiliating as that is. For the whole policy of the Board is to increase the national debt, increase it arbitrarily without adding a penny to national income or national resources. It is as if a man having a house worth \$10,000 and owing \$5000 on it went into the highways and byways proclaiming that it was really worth only \$5000. It is as if a man having contracted to deliver five bushels of wheat insisted on delivering ten because that would lessen the strain on his storehouse.

It depends a good deal on whose balloon is inflated. The money already spent, the nation is told, must be deflated, but interest rates, from which money comes in now, must be inflated. "Heads I win, tails you lose." It is in such atmospheres that the germs of revolution breed.

Of course, this thing is not going on forever. After all, the Federal Reserve Board is a responsible body, not an independent instrument, and the protests against its policies are already becoming so intensive that a change of some sort is inevitable. But it ought to be brought about promptly before the Board gets so immersed in the quicksands that not even the power of the United States Government can extract it.

LABOR LOSING SIGHT OF INEXORABLE BASIC LAWS.

APPEARING before the Railroad Labor Board, one W. Jett Lauck, formerly secretary of the National War Labor Board and lately employed in gathering statistics for the railroad brotherhoods, declares that "it is impossible for a family of five in the United States to maintain itself in even decent poverty for a penny less than \$2500 a year." He demands that that sum be fixed by the Board as the minimum wage for the 2,500,000 railway employees of the country.

On this basis, not allowing for the considerably more than \$2500 a year which great numbers of railway employees already get, the labor charge to the railroads would be \$6,250,000,000 the year.

Allowing five members to a family in a total population of 100,000,000, an average income of \$2500 for each family would amount to \$50,000,000,000 a year—a little less than the estimated total capital worth of Germany before the war.

If the farmers of the country were to demand an average earning for each farmer of \$2500, the price of food would be double what it is.

If the cost of living for railroad employees is what Mr. Lauck says, then wages in the cities must be raised to the point where anybody working on the farm under present conditions would be a fool and agricultural production would virtually cease. Either that, or the price of farm products would change so radically that the \$2500 of the city wage-earner would have less purchasing power than his present income.

The trouble with Mr. Lauck and economists of his school is that they get so tangled up in dollar marks that they cannot extricate themselves. A dollar is nothing but a symbol. How many bushels of wheat shall a man get for the work he does in the maintenance of the social and industrial order; how many pounds of cotton; how much to eat? Until the dollar is translated into such terms it means nothing and tells nothing. Men may go on adding noughts to the printed picture of their wage-earning, but they cannot overcome the laws of gravitation and they cannot wipe out the truth of the Divine dictum that by the sweat of his brow shall a man eat bread.

We believe that every man who works and puts his honest sweat into his toiling is entitled to and must get the due reward of his labor. For years we have devoted ourselves to securing for the cotton producer a decent recompense. What he earned he did not get; what he was entitled to was taken from him. He was a victim whom all who wished might rob. So would we consider it not good policy, but bad policy, for even the most humble order of railroad workers in this country to receive a wage unequal to his deserts. But it is an axiom that no man is going to get permanently out of this world more than he puts into it. In the vast and intricate equation which we call life there is an equilibrium naturally established that cannot be permanently disturbed without disaster. The tremendous vibration set up by the recent world catastrophe has artificially thrown things out of balance, it is true, but what the world is seeking is a restoration of that balance, not a further intensification of instability.

There is one thing we know we cannot do, and that is pick out a select class of workers, such as the railroad employees, and give them absolute guarantees against price fluctuations and relieve them of any and all worry in the matter of making both ends meet. We would not want an army of mollicoddles even if we could economically support it.

It would be a fine thing if, with scientific efficiency, we could decide exactly what proportion of the national income should go to the railroad workers and they themselves could then

decide how to divide it among themselves. It would be a fine thing, for instance, if the engineers could agree to let the switchmen earn the same as themselves, since switchmen also must live. And so would it be a fine thing if we could decide with scientific accuracy just what part of the national income the farmers should get. But so long as one farmer would produce on five acres five bales of cotton and another but two bales, the one will have a greater income than the other. And so long as one workman does more than another workman, the engineer than the switchman, there will be a difference in the compensation received. You cannot make men equal in earning power by legislation. It would be a terrible thing if you could. Ambition, energy, ability, thoroughness—these are things worth a price, and for them civilization will always pay a price.

Americans who have not sought to obtain benefits through unions so much as through hard work long ago discovered a solution for the wage problem. The man with something in him never was and never will be content to gamble his future on what a union may get for him in higher wages. The brakeman who becomes president of the road is not worrying about a raise in pay for brakemen so much as he is fitting himself to become an employee of a higher class. His way of getting ahead is to give more to the world and therefore get more back from the world.

We suggest to Mr. Lauck that if the employees actually need a minimum wage of \$2500 a year, they say to their employers: "We have to have more money. We are willing to work for it. Add 50 per cent to our wages and we'll lengthen our hours a bit until the world rehabilitates itself, and we'll put an energy into our work that will compensate you for every penny of the advance. Our families also want motor cars and talking machines, and we want them to have them. We are willing to work to get them. Give us the chance to meet the higher cost and higher scale of living by doing more work. That is what we want." But Mr. Lauck's clients are not thinking about what they can do for the world; they are thinking about what they can blackjack the world into giving them. The goose is not laying enough golden eggs.

The whole wage question is becoming so involved and the vicious circle is so steadily working overtime that we are merely in a race with collapse. There is only one solution, apparently, and that is general adoption of a system of payment for the actual service performed, a wage to every workman based on what he produces. Then it will be possible to appraise the labor increment in all things produced and make payment accordingly. Nothing substantial or peace-making will ever come from the abortive effort to measure pay envelopes by time clocks and pay a man not according to what he does, but according to how long it takes him to do it.

HIGH COST OF LIVING FOLLOWING WAR OF REVOLUTION.

REMARKING that the H. C. L. is obviously an ancient and honorable institution, which travels in cycles, a Florida correspondent sends an extract from the London Times of September 5, 1794, which proves, he remarks, that there is indeed nothing new under the sun. From the original clipping, which is pasted in a scrapbook owned by the late T. N. Vail, he says, the following is taken:

"The wages given to servants have increased during the last ten years more than thirty or forty years before. * * * Manufacturing laborers now have got in many places only to work three or four days in the week. * * *

"* * * Increase of trade and wealth have produced increase of luxury and made the necessities of life more expensive. * * * Workmen continually are combining together to leave their work unless the masters consent to increase their wages, and which only proves to be a temporary compromise until they have an opportunity of making a further demand."

The Appeal from Caesar

I THINK it imperative that the party should at once proclaim itself the uncompromising champion of the nation's honor and the advocate of everything that the United States can do in the service of humanity; that it should therefore indorse and support the Versailles Treaty and condemn the Lodge reservations as utterly inconsistent with the nation's honor and destructive of the world leadership which it had established, and which all the free peoples of the world, including the great Powers themselves, had shown themselves ready to welcome.

It is time that the party should proudly avow that it means to try, without flinching or turning at any time away from the path for reasons of expediency, to apply moral and Christian principles to the problems of the world. It is trying to accomplish social, political and international reforms, and is not daunted by any of the difficulties it has to contend with.

Let us prove to our late associates in the war that at any rate the great majority party of the nation, the party which expresses the true hopes and purposes of the people of the country, intends to keep faith with them in peace as well as in war. They gave their treasure, their best blood and everything they valued in order not merely to beat Germany, but to effect a settlement and bring about arrangements of peace which they have now tried to formulate in the Treaty of Versailles. They are entitled to our support in this settlement and in the arrangements for which they have striven.

The League of Nations is the hope of the world. As a basis for the armistice, I was authorized by all the great fighting nations to say to the enemy that it was our object in proposing peace to establish a general association of nations under specific covenants for the purpose of affording mutual guarantees of political independence and territorial integrity to great and small States alike, and the covenant of the League of Nations is the deliberate embodiment of that purpose in the Treaty of Peace.

The chief motives which led us to enter the war will be defeated unless that covenant is ratified and acted upon with vigor. We cannot in honor whittle it down or weaken it as the Republican leaders of the Senate have proposed to do.

If we are to exercise the kind of leadership to which the founders of the Republic looked forward and which they depended upon their successors to establish, we must do this thing with courage and unalterable determination. They expected the United States to be always the leader in the defense of liberty and ordered peace throughout the world, and we are unworthy to call ourselves their successors unless we fulfill the great purpose they entertained and proclaimed.

The true Americanism, the only true Americanism, is that which puts America at the front of free nations and redeems the great promises which we made the world when we entered the war which was fought, not for the advantage of any single nation or group of nations, but for the salvation of all. It is in this way we shall redeem the sacred blood that was shed, and make America the force she should be in the counsels of mankind. She cannot afford to sink into the place that nations have usually occupied and become merely one of those who scramble and look about for selfish advantage.

The Democratic party has now a great opportunity to which it must measure up. The honor of the nation is in its hands.

WOODROW WILSON.

We republish in full Mr. Wilson's letter to the Democrats of Oregon, since it may be taken to represent in its best form the dilemma in which the President sincerely believes he has succeeded in involving the country.

What is the nation's honor? If it has been mortgaged, who mortgaged it and on what authority? Who put the soul of Patrick Henry and Washington in the hands of Woodrow Wilson that he might barter it in Europe and sell the nation's superb birthright for a mess of international pottage?

Setting himself up as umpire, as judge and jury, on his own handiwork, the President proclaims it as a perfect thing. He will not even countenance its refining. As he made it, word for word, so must the nation take it, for this bridegroom has pledged, he tells us, the honor of the bride, and she, willing or unwilling, must make good his commitments. He took—unconstitutionally, we believe—the sovereignty of the nation to Europe and he pledged it there—pledged it although the people had freshly repudiated his leadership at the polls, although they had, by their votes,

issued their mandate that in peace-making the Congress also should have a share. And in exact accordance with predictions of the feasibility of so doing, made by him as an historian, he twisted and turned and so involved the good name of the country that he believed—and his close advisers believed—that the Senate must accept what he had done, be the cost what it might.

Over and over again we have demonstrated the utter falsity of the claim that we entered the war pledged to institute a new political order on the face of the earth, and for that purpose primarily. We went to war because we knew if we did not, a victorious Germany would bring the war to us. Germany, the President said, had already begun war on us. We preferred to fight when we could get help. We fought because of the black crimes which had been committed against us. We fought to beat back hell—not to shake hands with it.

The platitudinal 14 points and the subsequent addresses contained no formula for world peace. They became bases for deliberation, but what they meant not 1 per cent. of all the boys in France knew and not 1 per cent. of the whole population knows now. Indeed, it was the general opinion that they were part of the propaganda so generally employed by all the belligerents. If, therefore, the President carried to Paris any commission to insist on the creation of a new world order, the American people did not know it. They might, perhaps, have felt that the President had dedicated them to stand firmly for "freedom of the seas," but that great phrase, the meaning of which few knew and none could define, was dropped by the President almost before he landed on foreign shores. That was when honor, if honor was involved, began yielding to expediency, and it was not the Republican Congress, but Woodrow Wilson who did the yielding.

We, too, stand for the uncompromising championship of the nation's honor. We, too, advocate the doing of everything that can be done by this nation in the service of humanity, but to assume that the corollary of such intent means swallowing whole the Covenant is so violently at odds with the fact, so monstrous a perversion of logic that comment is superfluous. And yet the insistence by the President of so fallacious a belief jeopardizes the national welfare, since it deceives some people into believing that it is correct. We applaud idealism in any man, but when idealism becomes the vehicle of destruction, through malpractice, we and America are against it.

"To apply moral and Christian principles to the problems of the world" is the correct solution—the only solution—of the stupendous difficulties which confront us. On our knees we must find salvation. But this Covenant is a thing in which there is no God, a thing from which God deliberately was excluded. He is not mentioned in it. Worse than that, the plea that He be supplicated for aid and guidance was rejected. When the choice lay between God or the heathen, President Wilson and the gentlemen associated with him turned to the heathen. That is how much Christian principle there is in the Covenant. It is a code of cold formulas, of endless compromises, of subterfuge and evasion, and it is so worded that today, after months of discussion, even those who wrote it differ as to what it means. It is a Babel. Let not those who repudiated God invoke Him now to raise to life their dying body politic.

It is the very apotheosis of misconception to aver that they who gave their treasure and their blood in battle, before and after we went to their assistance, did so "not merely to beat Germany, but to effect a settlement and bring about arrangements of peace which they have now tried to formulate in the Treaty of Versailles." Those Frenchmen died at the first Marne and in the final battles to protect their firesides, to

beat back the blonde beast; they fought for life. They did not fight to make the world safe for Germans; they did not fight to give to Germany "a pleasing peace."

"As a basis for the armistice, I was authorized by all the great fighting nations to say to the enemy that it was our object in proposing peace to establish a general association of nations under specific covenants for the purpose of affording mutual guarantees of political independence and territorial integrity to great and small States alike, and the Covenant of the League of Nations is the deliberate embodiment of that purpose in the Treaty of Peace." **OUR OBJECT IN PROPOSING PEACE!** We did not propose peace. A beaten enemy proposed it, with the bayonet at his heart, to escape utter destruction. How can the nation expect good from a treaty if the President believes that we, not the assassins, **proposed** peace.

While the armistice was under discussion, inspired dispatches from Washington pointed out that "there will be plenty of opportunity later on for the explicit digression from any interpretation of the articles (14 points) which may affect adversely the national interests of any allied Power." No nation associated with us believed then or believes now that the 14 points constituted a great peace charter. They did not hold and do not now that our honor was involved in a particular covenant that flowed from them.

"The chief motives which led us to enter the war will be defeated unless that Covenant is ratified and acted upon with vigor." If there is one single intelligent man who in his heart believes that this nation entered the war with the "chief motives" that President Wilson suggests, we have not heard of him. We entered the war for our own safety, and we fought, too, to defend the right against merciless attack; but if Congress voted the expenditure of endless blood and treasure in order to establish the particular kind of League of Nations the President has underwritten, then every man in Congress who voted for war was a traitor and false to his oath.

We agree largely with the President's estimate of true Americanism. We would not be "merely one of those who scramble and look about for selfish advantage," if there be any such, however much we may doubt the propriety of employing such language when it will be held to apply to some of our late associates. But this Covenant which the President brought back with him condemns us forever not only to be one of those who scramble for selfish advantage, but also to guarantee with the lives of our young men that what the nations have grabbed in the scramble they shall hold secure forever.

To stand at the front of free nations, where formerly we stood; to breathe each day the breath of freedom, which invigorates all our enterprises; to stand untrammelled in the arena of the world, ready to throw our ponderous weight into the scales whenever and wherever darkness threatens light and civilization hangs in the balance; to hold firm to our freedom of judgment—aye, that is worth while. But if it be true Americanism to throw our ideals and our institutions into a grab bag; if it be true Americanism to transfer the head of our sovereignty from the Potomac to the Alps; if it be true Americanism to repudiate Washington and Lincoln, tear down the ensigns of liberty, mock our great traditions and associate with a few other great nations in the institution of a universal hegemony, dedicated from the beginning to the perpetuation of all the ills and stratagems and injustices that Europe is heir to, then Americanism has ceased to be the glorious thing it was and naught is left but skin and bones.

Truly magnificent is the President's isolation on the treaty. The army that early echoed his applause of it has melted away. All save himself alone have seen the need of reservations; even men who had grown old in advocacy of a league of nations before Mr. Wilson took the matter up have urged

him to accept the reservations made, to yield his single judgment to the mass judgment of the Senate and the nation. But the pride of paternity possesses him. He refuses to look the facts in the face. He still paints a picture of what he considers the Covenant to be and mean, and no argument can move him. He is the great obstructionist who is preventing any league of nations.

It is because of this that the country has remained at war months after peace should have prevailed. And yet his employment of noble words and lofty phrases in his descriptions of the Covenant are dangerous, because there are so many thousands who have never read the Covenant and could not understand its intricate provisions. They have to accept leadership on trust. Still, California has spoken.

If the Democratic party follows the course laid down by the President, it will abandon Americanism, it will abandon Jefferson and Jackson, it will toss its history into San Francisco Bay, and it will emerge from the campaign in November so discredited that not in sixteen years, nor in ten times sixteen years, can it be revived. Whom the gods would destroy they first make mad, but surely the time has not come when the millions of voters comprising the Democratic party will shut their eyes and ride to ruin solely because Mr. Wilson so commands. There are signs of a revolt. There are Democratic Senators who are tired of having rings in their noses.

But Americans everywhere may rejoice that they themselves at last will have the opportunity, either in the conventions or thereafter, to say what they think of the godless Covenant. It is their sovereignty which is being bartered, their traditions which are being sacrificed, their history that is being repudiated. They, and they only, we believe, ever had the requisite authority to act on the Covenant affirmatively, since representative government is without power legally to change its own form. Let the issue, therefore, go to the people, as the President desires. The verdict will be a sure one and the lesson taught will not be forgotten in another hundred years.

THE COST OF LIVING IS CERTAIN TO INCREASE.

MINERS' wages have been raised; Pullman rates, in some cases, have been doubled; freight rates are about to be increased not less than one-fifth; taxes, instead of going down, are going up; labor is still moving from the farms to the cities and countless fields are deserted; trolley fares are rising; the cost of gas and gasoline is bouncing; ship rates, in many cases, have gone up; in fact, in all those basic things which determine the cost of living there is a pressure upward.

Yet politicians sagely tell us that the cost of living has reached its apex and is on the rebound. Administration officials assert they are going to get court decrees that will reduce prices. Why not be honest and face the truth? It is an old saying that you can have milk and you can have meat, but you cannot have both from the same animal. You can have higher wages and you can have a lower cost of living, but you cannot have both together.

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R. W. HUE & SONS, Arkadelphia, Ark.—We want to assure you that we appreciate more than ever the MANUFACTURERS RECORD, and want to congratulate you on the good work that you are doing for the country.

While we might differ on some points, yet, in the main, you are so clear and fearless in your presentation of conditions that we feel we can endorse you in almost anything that you say. The principal manager of our firm, which is our father, is already a subscriber of the MANUFACTURERS RECORD, and would not be without it for double the price.

Two Great Business Achievements of 19th Century— One for Good, One for Evil*

By RICHARD H. EDMONDS.

The greatest business achievement for good of the first half of the nineteenth century was the development by the South of a cotton industry which represented more capital invested than that invested in the entire manufacturing interests of the United States during the same period and which largely shaped the politics and the finances of Europe and America.

The greatest business achievement for evil of the second half of that century was the complete domination of the South's cotton-producing interests by the cotton manufacturers and financial interests of Europe and New England, to the degree that they enchained the cotton growers of the South in economic slavery and poverty to a greater degree of suffering than the slavery of the black man prior to 1860. Every man who during the last 50 years has sought to beat down the price of cotton has to the extent of his ability been responsible for the appalling poverty of the cotton growers, white and black, for the illiteracy which has cursed the South, for the bad roads and other ills fastened upon this section by the enslavement of the people who raised the bulk of the world's cotton.

The progress of civilization may be measured by the consumption of cotton goods and the advance of the world will be helped or hindered by the extent of the supply of cotton.

For half a century the South has done the greatest business-missionary work in human history. It has impoverished its soil, drained the vitality of its people and borne great poverty while it enriched the world with its cotton.

It is safe to say that the South has thus made to the world's welfare a contribution or gift of not less than \$25,000,000,000, or say as much as the cost to the United States of the World War. Only through working women and children in the cotton fields and only through continued desperate poverty to produce cotton to sell in competition with that raised in India, where labor is paid about \$10 a year, was it possible for the South to keep on growing cotton. No cotton crop in 50 years prior to three years ago sold for one-half of its intrinsic value. But so great was the power of the cotton interests of Europe, and for a long time of those in New England, against a fair price for cotton that prices were kept below the cost of production, and the soil and the cotton growers were steadily drained of vitality.

Every man engaged in fighting for a fair price for

cotton, and that price has not yet been reached, may well feel that he is doing a religious work which means more and better schools, more and better churches, more and better home comforts for millions and better roads and a general advance of the material, moral, educational and religious life of a section in which live one-third of the nation's population.

To lift from these people the pall of poverty, to quicken their lives in every sense, is in itself a mighty missionary work for God and humanity. I rejoice, therefore, in the splendid work of the American Cotton Association and in bidding Godspeed to those who are carrying on this great campaign. I believe I am co-operating in a work which will redeem the cotton growers from poverty, which will stimulate the educational and religious activities and help to advance every good cause in the South, and, in doing so, prove a great blessing to the whole nation, for the development of the South means the enrichment of the nation and the rounding out of a broader spirit of national life and of patriotism.

The world is desperately short of foodstuffs. A food famine of such an extent as to make present prices of foodstuffs seem very low as compared with what is probably ahead of us is impending. In such a food scarcity, with inevitably higher prices, the germs of revolution are hatched.

The safety of our country and of civilization largely depends upon our utmost efforts to increase our food supply. The nation must look to the South for increased food supply. It cannot depend upon other sections. It is, therefore, vital for Southern farmers, regardless of the price of cotton, to raise all of their own grain and provisions and at the same time do as much as possible in helping to feed other sections. To this task the American Cotton Association may well address its most earnest efforts in order to secure an ample food production first, with cotton as a secondary or surplus crop. In this diversification of agriculture lies safety for the South and for the nation.

National Agricultural Policy Needed.

D. A. WALLACE, editor The Farmer, St. Paul, Minn.—I am duly in receipt of a reprint from your issue of April 8, in which you discuss the national need of an agricultural policy. Permit me to congratulate you on the excellent manner in which you have handled this topic. It is one of the best statements I have seen on this very important question. In our current issue I am referring to this in an editorial, copy of which is being sent you herewith.

Thanking you for calling my attention to your interest in this question of paying proper attention to agricultural development, I am, etc.

* Telegram to South Carolina Division American Cotton Association, Columbia, S. C., at its meeting on May 4.

Dr. Frederick G. Cottrell, Eminent Scientist, to Be New Director of Bureau of Mines.

Washington, D. C., May 5.—[Special].—The nomination of Dr. Frederick G. Cottrell for Director of the Bureau of Mines, Department of the Interior, was sent to the Senate today by President Wilson to take the place of Dr. Van H. Manning, resigned. Dr. Cottrell was the assistant director of the bureau under Dr. Manning.

While at the University of California, from 1902 to 1911, Dr. Cottrell's chief contributions to science were researches relating to the electrical precipitation of fume and fine particles suspended in the gases of smelter, blast furnace or cement works flues, and he finally evolved what is known as the Cottrell process for this purpose. This invention was first utilized at the Selby smelter in California for removing fumes from the waste gases of a sulphuric acid plant at the smelter, thereby abating a nuisance that threatened to necessitate shutting down the works. Subsequently this electrical precipitation process was installed at other smelters to remove fumes and solid particles contained in the escaping gases, and it was also successfully used at cement plants, notably near Riverside, Cal., to prevent the dust from the calcining kilns from damaging nearby orange groves and vegetation. Today the Cottrell process of fume and dust removal is in world-wide use, and is recovering materials heretofore wasted to the value of many thousands of dollars. One of the latest installations is at a large smelting plant in Japan, while the largest installation is at the Anaconda smelter, Anaconda, Mont. Dr. Cottrell in a desire to encourage scientific research turned over his extensive patent rights to a non-dividend-paying corporation known as the Research Corporation, a body formed for that purpose. A fundamental requirement in the incorporation is that all net profits shall be devoted to the interests of scientific research.

In 1911, when Dr. J. A. Holmes, the first director of the Bureau of Mines, was serving as a member of commissions appointed by the Government to study alleged damages from smoke and fumes from the Selby and the Anaconda smelters, and the Bureau of Mines was investigating at length the smelter-smoke problem, Dr. Cottrell, because of his scientific attainments and his special knowledge of metallurgical problems, was appointed chief physical chemist in the bureau. In 1914 he was appointed chief chemist; in 1916, chief metallurgist, and in 1919, assistant director.

Aside from his work on smelter smoke, Dr. Cottrell has been deeply interested in and intimately connected with work on the separation and purification of gases by liquefaction and fractional distillation. During the World War, and subsequently thereto, the development of the Norton or Bureau of Mines process for the recovery of helium from natural gas has been his special care, and it was chiefly through his efforts that a plant for recovering helium on a large scale for military aeronautics has been erected near Petrolia, Tex.

Dr. Cottrell is a member of the American Chemical Society, Mining and Metallurgical Society of America, the American Electrochemical Society and the American Institute of Mining and Metallurgical Engineers. He was awarded the Perkin medal by the New York Section of the Society of Chemical Industry in 1919 in recognition of his work on electrical precipitation.

Hydro-Electric Development of Far-Reaching Importance to Arkansas Waits Only on Action of Congress.

Cotter, Ark., May 6.—[Special].—The final survey for the big hydro-electric plant in the White River at this place has been completed, and the field notes are in the hands of Henry J. Allen, chief engineer of the Dixie Power Co. of Chicago. If Congress passes the present general water-power bill which is before it at this time, work will be started on the project some time during the next six months.

After investigating different kinds of dams, the company has decided upon the solid type. It will be built 150 feet high, and will be 2300 feet wide at the crest. The construction material will be concrete. J. H. Reynolds, a well-known St. Louis contractor, who expects to be identified with the construction of the dam, has been on the ground several weeks studying construction

problems. The White River at the site selected has a solid rock bottom, and the mountains on both sides of the river present solid rock side to tie to. Mr. Reynolds says there is plenty of stone, gravel and sand at the site, and the only thing that will have to be shipped in will be cement and reinforcing materials. The construction problems are simple compared with other projects of this kind.

Notwithstanding the fact that the Buffalo, White, Norfolk and other rivers in Arkansas contain hundreds of thousands of horsepower, there has been but little hydro-electric development in the State. The Cotter project is the largest ever attempted. Engineers estimate that from the height of the dam proposed 100,000 average horse-power can be generated. The 52-foot dam in the White River, 120 miles north of Cotter, which furnishes power to Southwest Missouri, generates 20,000 horse-power.

At the site of the Cotter dam, on the White River, nature has done a large part of the work that would ordinarily have to be done by human hands and machinery. There is a natural rock-walled basin and the material on the ground to do the work. A spur can be easily laid from the main line of the White River Railroad to the dam site, a distance of a mile and a half. There is an easy river grade all the way, and the movement of machinery to the site presents no difficulty.

The whole State is watching the development of this project eagerly, for it means cheap power for all sections. It also means the rapid development of the natural resources of the White River country in the Ozarks. These consist of zinc, lead, iron, manganese, timber, stone and agriculture.

For years there has been a crying need for cheap power for mining, quarrying, smelting purposes and general needs, as the section is far removed from a coal supply and wood is an uncertain and unsatisfactory power producer. With cheap power the potential wealth of the section will be quickly garnered.

With electricity available for smelting purposes manganese and iron furnaces and zinc and lead smelters could be located close to the point of production. The territory also produces from 50,000 to 75,000 bales of middling cotton every year, which would make the installation of cotton mills attractive. An unlimited amount of hardwood timber would also be a lure for woodworking plants of all kinds.

In a recent interview with Walker V. Powell, president of the Dixie Power Co., he stated that all the power would be marketed in the State. Already the company has had enough requests for power from different Arkansas points to consume all the primary power the plant would develop. The rice growers of Eastern Arkansas have signified that they would take it all if they could get it for pumping purposes. The cities and many of the larger towns are also looking forward to the cheap power which the plant will generate.

The lake which will be created by the construction of the dam will be 75 miles long, reaching to the Arkansas-Missouri State line, and will inundate some 50,000 acres of land. Only 10 per cent of this land is agricultural land, the rest being rugged mountain sides for the most part. The agricultural land lies directly along the river, and consists of narrow bottoms. Besides this, there are no towns, railroad tracks or other high-valued property that will be damaged.

Besides the power, the lake will be a great benefit to a big territory above Cotter rich in undeveloped natural resources, giving it cheap water transportation.

There are large bodies of undeveloped zinc, lead and iron in that section, as well as hundreds of acres of pine and hardwood timber, and a large area of agricultural land which has never been subjected to the plow. Water transportation and cheap power combined would rapidly develop all these resources.

In the territory lying between Cotter and Newport on the south are large bodies of glass sand, zinc, iron and manganese which would be on the route of the transmission lines running south which cheap power would help to develop quickly.

The development of the project hangs on whether Congress passes the general water-power bill. The development of hundreds of other water-power projects on so-called navigable streams also hangs by the same thread.

Will Cost 50 Cents a Pound to Raise Cotton This Year, Southern Economist Declares

By W. W. MORRISON, New Orleans.

What will it cost to grow the crop of American cotton this year? This question is now uppermost in the minds of the growers. There never was a time in the history of cotton production when it so vitally concerned civilization as it does today. Obvious world conditions make it so. It costs now \$45 per month to feed one plow animal. Labor costs something more than \$100 per month, and the supply is uncertain and inefficient even at that. Planting seed costs from \$150 to \$250 per ton, and the quality is indifferent. In fact, every item that enters into the cost of production is higher than was ever known before.

Based on the average yield of the last five years, the price of these items indicate a cost of something like 50 cents per pound. The reactionary speculative element will hardly believe this, nor is it likely to be believed by a large section of the spinning industry in this country and in England, especially those of the industry who follow the lead of such economists as Prof. J. A. Todd, who recently stated that it cost 25 cents per pound to grow the crop of 1919, and, incidentally embarrassed us by not offering a single vestige of evidence to support his statement, although it involved a matter of the most serious importance.

However, what these reactionaries and these alien economists and their followers think as to the cost of growing the crop is wholly unimportant, and it has been so for quite a long time. Thousands of farmers, merchants and bankers—the real builders of the South—believe that the cost of production this year will be 50 cents per pound and more. Their view, and their view alone, is important. For the history of recent years makes it evident that whatever they conclude as to the cost will definitely determine the course of prices, and not the conclusion of reactionaries either at home or abroad.

The producers know all about the big profits made by the mills in this country and in England. While they are more acutely alive to what this crop is going to cost than ever before, they are just as much alive to the difference between what they are receiving for their cotton and what they are paying for it when they

buy it back in the shape of the manufactured product. It is quite the practice now for the farmer when he buys a piece of cotton goods to weigh it and figure out just what percentage this difference amounts to. The result is often electrifying, and is frequently the subject of the widest comment.

Whenever money gets tight among the speculative interest in the large centers and the rates go up, the country is called on to furnish funds to break the strain. The South is now participating very largely in the loans extended to relieve such a situation. In view of the fact that these loans are made from a surplus above what the business of the South requires, there is an amazing inconsistency in assuming that one of the staple products of the South is going to be depressed by these financial disturbances. Yet, this is just what is assumed by the seller every time cotton contracts break on account of tight money in the big centers.

The cotton producers are better informed now than ever before as to the cause of these financial disturbances. They know that the South is loaning a steadily increasing amount of its surplus money to relieve the resulting financial distress. They frequently point out the utter absurdity of expecting cotton, whose economic position is essentially sound, to suffer because a speculative position foreign to cotton has proven to be essentially unsound. They emphasize, however, that it has been the sellers of future contracts who have suffered in every case on account of this irrational interpretation, and not the producers.

Such, it is felt, is a fair summary of the dominant trend of current thought among the cotton growers and their conferees, which include the bankers and merchants of the South. Do you think their views will control the price, or will it be controlled by the difficulties of speculative interests foreign to cotton, or by the dictum of alien economists as to what it cost to grow it? Which of these have wielded the master influence during recent years, and which is it safe to assume will wield the master influence during this year and the next?

Six New Cotton Compresses to Be Installed at Galveston.

Galveston, Tex., May 10.—[Special.]—Plans have been adopted by the Galveston Wharf Co. for the construction of six new cotton compresses. They will be located at shipside, upon the Galveston water-front. Much importance is attached to the proposed improvements, for the reason that they will enable the loading of compressed cotton bales direct from the presses into the holds of the steamships.

The cotton compresses will be equipped with monorail and overhead conveyances. According to J. H. W. Steele, who has the contract for constructing and operating the compresses for the Galveston Wharf Co., the applying of high-density compression to cotton bales at shipside will give the steamships more carrying capacity and improved storage.

The sub-port of Texas City now is the only port on the Gulf with high-density presses at shipside.

Reduction in freight rates and the abolition of delays in handling cotton through the wiping out of drayage, which the shipside presses will bring about, will save millions of dollars to shippers, it is asserted. Another immense saving will be effected by the presses, for when they are put in operation interior shippers can procure through bills of lading over all steamship lines entering Galveston.

This will save big sums now used in financing the cotton crops. Under the present scheme interior shippers can get only local bills of lading on their cotton shipped through Galveston, and ocean bills of lading are not given them until the cotton has been compressed in high-density presses here and then switched or drayed from the land presses to shipside. Frequently 30 days'

delay is occasioned in waiting before bankable bills of lading can be obtained.

Under the new scheme, which shipside presses will make possible, shippers can bank their through bills of lading to foreign ports the moment they are signed by the rail carriers, get their credit, relieve the banks, and save large sums in interest, besides their saving in ocean rates, dispatch and trouble.

The battery of six new presses, when complete, will relieve Galveston of the strain during the rush season and enable the land compresses, railways and warehouses here to further develop their port storage and concentration facilities with new business, Mr. Steele said.

In the work of carrying out the contract with the Galveston Wharf Co. for installing and operating the new presses, Mr. Steele has associated with A. J. Dossett of Waco, one of the best-known cotton compress men in the South. The initial investment will represent about \$500,000. The six presses will have a 24-hour capacity of 1500 bales.

There will be 15 high-density presses in Galveston when the new contract is filled. At the present time nine are in operation in various parts of the city. In addition, there are three high-density presses at Texas City.

Completing \$60,000 Florida Peanut Oil Mill.

In Jackson county, near Appalachicola, Fla., J. F. Warren and associates have completed a peanut oil mill at a cost of \$60,000. This plant will handle the Jackson county peanuts marketed during the next several months from this section of Florida, a peanut production district in which the farmers have planted hundreds of acres of peanuts this year instead of cotton.

\$1,500,000 HOSPITAL UNDER CONSTRUCTION AT TULSA, OKLA.



The accompanying picture presents a view of St. John's Hospital, now being erected at Tulsa, Okla. Part of the building will be ready for occupancy within a year, according to J. C. Bohan of the Fuller Construction Co. of Chicago, who have contract for the work. Completion of the entire structure within two years is expected. Reinforced concrete, with outer finish of terra-cotta and brick, is to be the style of construction. Alabama marble will be employed in finishing the first floor, while most of the other floors will be of terrazzo and the corridors floored with linotype. Ordinarily the hospital will be able to care for about 225 patients, but if required it can be made to accommodate 325 beds. All floors will be connected by both stairs and noiseless elevators. On the second floor is to be the main bed space. Other floors will accommodate the nurses' quarters, chapels, nurses' training school, the fever-rooms, the dental clinics, modern maternity wards and operating wards. The complete structure will cost \$1,500,000.

Hastings Wharf & Terminal Co. Organized.

Additional waterfront terminal facilities at Norfolk will be provided by the Hastings Wharf & Terminal Co., which has been organized with \$500,000 capital by W. B. and G. T. Hastings. This company's plans include building pier space for three seagoing vessels, marine repair shop, marine railway for harbor craft and storage warehouses. The pier proper will be constructed of concrete, with clear berth of 380 feet on one side and 362 feet on the other, 90 feet wide. On one side will be laid two tracks for handling rail shipments, and there will be installed a railway crane to assist in unloading ships. The marine railway will care for the company's 31 harbor craft employed in stevedoring, besides public contracts usually handled by marine railways. The company has a two-story 188x44-foot warehouse, which will be fireproofed by the substitution of concrete for wooden floors and the building will have three stories added to its height. Later, additional five-story warehouses of these dimensions and of fireproof construction will be built. Neff & Thompson of Norfolk are the architects preparing plans and specifications for the pier proper.

Community Housing Corporation Plan Advocated to Relieve Shortage.

New Orleans, La., May 10—[Special.]—Declaring that the United States is short 3,340,000 homes, F. Roger Miller, secretary of the Macon (Ga.) Chamber of Commerce, advocated at the fourteenth annual convention of the Southern Commercial Secretaries, held in New Orleans May 4, that the national remedy lies in a "community housing corporation" plan. The 10 features of his plan are:

First—That the problem of housing the "60 per cent" must be placed on a community basis, organized, financed and operated by the initiative of the "40 per cent."

Second—Community housing corporation must sell permanent homes and discard "temporary relief for the pressing emergency."

Third—Community housing must provide every advantage in production, location and beautification.

Fourth—Easy terms for the industrial home buyer.

Fifth—Community builders must analyze local conditions before attempting a housing project.

Sixth—Federal and State agencies are needed to correlate the activities of community organizations.

Seventh—A speedy enactment of bills now before Congress to provide Federal aid for home building, to relieve burdens of taxation upon the real estate mortgages, and to establish upon an efficient basis governmental facilities for promoting home-building and home-owning.

Eighth—Speedy enactment of State laws supplementing the Federal laws.

Ninth—General adoption of definite community plans, modern housing codes and State and municipal laws designed to eliminate undesirable housing codes, and State and municipal laws designed to eliminate undesirable housing or "shack villages" or "other breeding places for disease, crime, ignorance and conflagration."

Tenth—Development of similar plans for promoting home ownership on the farm and the betterment of rural life.

Building 12,000-Barrel Louisiana Oil Refinery.

All contracts have been awarded and construction material is arriving at Shreveport, La., for the big plant which the Great Southern Producing & Refining Co. of Indianapolis will build on the Red River. This company's plant will have a daily capacity of 12,000 barrels of oil, and it will be equipped with the Forward process of refining, for which the company owns the exclusive right in Louisiana excepting a small district surrounding Baton Rouge, where it has the right to refine. J. E. A. Moore, Cleveland, O., is the construction engineer. The refinery site comprises 57 acres adjoining the city of Shreveport and the Texas Company's tank farm, through which extends the Texas & Pacific Railroad.

Modern Factory for Manufacture of Fish Oil Completed.

Apalachicola, Fla., May 6—[Special.]—The Southern Menhaden Co., who have just completed at a cost of several hundred thousand dollars a modern factory for the manufacture of fish oil and scrap at Port St. Joe, Fla., sent their fleet of fishing boats out for the first time this week. One day's catch of three boats amounted to 3000 barrels of fish. These were all caught within a radius of two miles of the factory in St. Joseph's Bay.

Shortage in Farm Labor and Decrease in Agricultural Production Calls for Stern Measures

PLAN SUGGESTED FOR CENTRAL ORGANIZATION TO OPERATE A LARGE NUMBER OF FARM TRACTORS TO INCREASE ACREAGE.

[The following letter from George F. Miles of Pomfret Center, Conn., to the editor of the Manufacturers Record, under date of May 6, throws an interesting sidelight on the critical situation in the country's agricultural production:

"On my arrival here from St. Augustine, Fla., a few days ago I was so shocked at the condition of the farmers in this part of New England that I decided to present the situation to you in the accompanying letter, in the hope that you would aid through your influential magazine in waking up the financiers of the country to the dangers of the prospective food shortage which seems to be inevitable unless some plan is devised for helping farmers to cultivate their lands and harvest their crops. In this region farm laborers are so scarce the land owners have been obliged to leave their farms untilled, and practically no produce is being planted for market; the farmers as a rule being compelled to confine their operations to a few acres for their household uses, and, as this condition of affairs seems to be general throughout the country, the cost of the necessities of life promises to be so high that great distress is likely to be the result, if some remedy is not promptly found. If, however, the use of farm machinery could be furnished to small farmers at a reasonable cost, I believe that it would help the situation and encourage farmers to enlarge their operations, which they are now barred from doing through lack of either manual labor or the use of machinery. In order to supply the required machines, and properly distribute them, a large amount of capital would be needed, and the work should be undertaken by prominent financiers. Unless men of this class can be induced to seriously consider the agricultural conditions now prevailing, and help to remedy them, I fear that the future holds a great deal of privation in store for the majority of the citizens of this country."—Editor Manufacturers Record.]

By GEORGE F. MILES, Pomfret Center, Conn.

It may be remembered that I called attention in 1918 to the deplorable condition of the farmers throughout the United States owing to the difficulty of securing the services of agricultural laborers, largely due at that time to the drafting of men for both the army and navy. I then suggested, as a substitute for manual labor, the use of agricultural machinery, and I outlined a plan by which this might be done at a very reasonable cost per acre to the farmers if Government approval and aid could be secured for the plan suggested, but, though I had the matter brought to the attention of the Secretary of Agriculture through the good offices of both Senator Fletcher and Senator Trammell of Florida, no results were forthcoming, and the prospect of a shortage of food crops seemed to give the officials of the Department of Agriculture very little concern.

It is true that the Secretary of Agriculture replied to Senator Trammell that, in his opinion, tractors and other farm machines could not be secured in sufficient numbers to make much impression on the crop output of that year, but through the kindness of Mr. Charles Deering, who is interested in the International Harvester Co., I was put in touch with some of the officials of that corporation and I was assured that there would be no difficulty whatever in obtaining all the agricultural machinery needed to put the plan which I then outlined into practical effect. Nothing was done, however, as the Government control of all business at that time made it a hopeless task to attempt to put an expensive movement of this kind into practice without Government co-operation. It will be observed, however, that the cost of living has been steadily increasing since that time, and the acreage of land being cultivated is apparently decreasing.

It does not, therefore, take a very astute mind to arrive at the conclusion that actual famine will be the result of the decrease in the acreage of food crops, and that, too, in the not very distant future.

The demobilization of the military forces of the country seems to have had very little effect on the labor situation, as the prevailing high prices of all commodities seem to have had such a stimulating effect on manufacturers of all classes that they are taking out of the rural districts for their factories every laborer that they can induce to leave the farms, offering wages with which no farmer can compete, and in some cases sending automobiles round the country to take their operatives to and from their factories, with the result that farmers are compelled to practically abandon the business of growing crops for sale, and a large percentage of them are confining their operations to cultivating only a sufficient acreage for their own needs, as they find it difficult to keep even members of their own families from leaving the farms and accepting the higher wages obtainable in the manufacturing districts.

It looks as if neither the manufacturers nor their employees gave a thought to the practical effect of making it impossible to produce the food crops needed by the people of the United States.

Large profits to the factory owners and others not connected with the cultivation of the soil or high wages to the operatives will not secure for either class the food which they need if it is not produced by the farmers, and the farmers will clearly be unable to produce crops unless aided by either manual labor or machinery.

There seems, however, to be little hope of inducing labor to return to the farms so long as such high wages are obtainable in other directions, and the only remedy, therefore, seems to be through the agency of agricultural machinery of all kinds. Up to the present time, however, it has been practically impossible for the large class of small farmers throughout the country to obtain the services of machines of the character required, as they cannot afford to buy these machines, and no adequate plan has ever been effected by which their services could be obtained on a rental basis.

The plan which I outlined two years ago was suggested with a view to putting the use of such machinery within reach of small farmers by making it possible for them to have their lands plowed and otherwise cultivated on the basis of a fixed price per acre by local corporations or agencies organized for that purpose. The plan which I then suggested to you, which you were good enough to have published in the MANUFACTURERS RECORD, was about as follows, viz.:

To have a strong central organization created to promote and finance the establishment of smaller corporations throughout the country which could own or otherwise acquire possession of sufficient agricultural machinery to supply the needs of each district, by either renting the machines (operated by the owners' skilled drivers) to farmers who desired their use, or if found to be more expedient, doing the work at a fixed price per acre, or even on the basis of crop sharing with the landowners.

Any of these plans would tend to vastly increase the acreage cultivated, and I think it would prove a profitable venture for all concerned, both to the owners of the machines and to the farmers, as well as an inestimable boon to the people at large, who are now suffering from the excessive cost of the necessities of life, which cost will continue to increase unless the present decrease in production is stopped and some substitute is found for the loss of agricultural laborers which are steadily being withdrawn by manufacturers from the country districts.

It seems as if the craze for acquiring dollars has utterly blinded both the manufacturers and laborers at the present time. They seem to think that if they have sufficient money in their possession they can always live in comfort, and they evidently fail to

realize that if the food crops are not produced they cannot get them, no matter what price they are prepared to pay.

There is little doubt that the average rich man feels that so long as he can outbid his neighbor he can always get what he needs, even if food is scarce, all of which may be true in normal times, but if the pinch becomes too severe, and hunger stalks through the land, it will then become a question of force as to who will or will not obtain the necessities of life, and no amount of foresight in the way of laying in supplies for the future will avail, as a hungry community is not likely to look passively on their well-supplied neighbors and permit them to live in comfort if the majority are in a starving condition.

All of this may seem to be a very pessimistic view to take of the situation, but nevertheless the writing is on the wall, plainly to be seen by anyone who is not wilfully blind, and it does not take a great deal of wisdom to make certain that unless the lands of the country are cultivated and the decrease in the production of food crops stopped a condition of famine is inevitable, and no amount of wealth in gold or silver will be of much service to its owner if there is no produce in the market to buy with it.

It looks, therefore, as if the time had arrived for the men who control the finances of the country to wake up and take note of existing conditions in the agricultural field, and to bend their energies to encouraging the enlargement of the food crop acreage of the country by every means in their power, or they will find, when too late, that privation will drive people to excesses which may change the whole condition of life in America, as it has done in other parts of the world.

Textile Exports to America Show Marked Increase.

London, England, April 28—[Special.]—The many reports that have been made during recent months respecting the marked increase in the volume of British exports to the United States are fully confirmed by the official figures showing the shipments for the first three months of the present year. For purposes of comparison, details of the quantities are given, in every case where they are available, side by side with the quantity for the corresponding period of 1913, the last complete pre-war year:

	1913.	1920.
Cotton yarn.....	1,684,400 lbs.	2,908,600 lbs.
Cotton piece goods.....	11,926,100 yds.	34,520,900 sq. yds.
Cotton flags, handkerchiefs and shawls, not in the piece.....	100,300 yds.	1,213,500 sq. yds.
Worsted yarn.....	9,500 lbs.	425,000 lbs.
Woolen tissues.....	670,300 yds.	2,065,500 sq. yds.
Worsted tissues.....	2,226,300 yds.	1,705,100 sq. yds.
Wool carpets, rugs, etc.....	32,300 sq. yds.	65,500 sq. yds.
Linen piece goods.....	35,233,800 yds.	19,906,000 sq. yds.
Spun silk yarn.....	174,300 lbs.	146,910 lbs.
Silk broadstuffs.....	65,882 yds.	103,846 yds.
Silk mixture.....	131,341 yds.	55,595 yds.
Flax and hemp yarns.....	294 tons	90 tons
Jute yarn.....	85,400 lbs.	131,400 lbs.
Jute piece goods.....	22,160,000 yds.	20,924,300 sq. yds.
Jute sacks and bags.....	27,362 doz.	3,909 doz.

These figures indicate an enormous increase in exports of cotton yarn and piece goods, a 13-fold increase in cotton flags, handkerchiefs and shawls, not in the piece, of nearly 45 times the weight of worsted yarns. Woolen cloths are about 150 per cent more, allowing for difference between linear and square yard measure, and woolen carpets are just over twice the square yardage.

Comparison of money value only, the quantity not being given in the official returns, are:

	1913.	1920.
Silk lace.....	\$2,208	\$61,473
Other silk manufactures.....	13,879	51,541
Non-waterproof apparel.....	28,322	91,233
Haberdashery.....	9,076	8,500

Taking the whole of the goods unenumerated alone, the total value in the first three months of 1913 amounted to £2,337,595; the value in the first quarter of the present year amounted to £9,433,154, showing an increase of more than 300 per cent.

The watermelon yield promises to be the largest in many years. According to estimates based on reports from growers in the four principal watermelon-growing States of the South—Texas, Alabama, Georgia and Florida—the total acreage already planted and in prospect this season is 86,300. It is expected that 10,000,000 watermelons will be marketed.

Industry to Have Better Standing in National Politics.

The following recommendations were drawn up by a committee representing South Texas industries appointed at request of Stephen C. Mason, president National Association of Manufacturers and consisting of E. A. Holmgreen, San Antonio; Rawle Buckner, Houston; H. N. Timolat, D. Prassel and C. C. Leel, San Antonio.

These recommendations are now in the hands of the National Platform Committee of the National Association of Manufacturers, and after having been embodied with similar recommendations made by the manufacturers of every other State, will be submitted to the Democratic and Republican conventions which are soon to meet.

1. We believe our Government should, as early as practicable, launch a strong campaign of "Americanism education" throughout the country, including distribution of literature through whatever channels are deemed most effective, the use of weekly and daily publications and through the moving-pictures, with the obvious intent of counteracting the false doctrines emanating from the minds of anarchists, socialists and other radicals.

2. We urge that no foreigner shall be given citizenship or the right of franchise unless he can read and write the English language.

3. We believe the Government should furnish necessary facilities for the encouragement of nation-wide voluntary military training.

4. We recommend more efficiency and economy in the management of our central Government.

5. We recommend revision of the La Follette Seamans' Act and also such other legislation as will encourage and perpetuate the development of our merchant marine, even to the extent of subsidizing our steamship lines.

6. We recommend the Government be urged to increase its appropriations for the furtherance of our foreign trade and that a better distribution of sailings be made from Atlantic and Gulf ports over the principal trade routes of the world.

7. We recommend that no undue restrictions be placed upon the immigration of Mexican labor, as Texas farmers entirely depend upon such labor, and the prosperity of Texas cities depend upon its agriculture. We wish to point out that owing to the unprecedented shortage of farm labor less than one-half of the land in South Texas is under cultivation as compared with the amount under cultivation two years ago, due entirely to the shortage of labor immigration restrictions.

8. We recommend that some action be taken by the Government to prevent the tying up by strikes of public utilities and other industries which affect the public as a whole.

9. To protect industries and other property, both public and private, we are in favor of strict enforcement of existing laws, and the enactment of additional legislation if need be, pertaining to the punishment of those advocating by force or violence the overthrow of our Government or unlawful destruction of property.

10. We believe that committees or individuals testifying before Congress or its committees should be proven representatives of the industry they profess to represent.

11. We urge the simplification of income and excess profits taxation, even to the extent of changing the present system to a simple tax on sales.

Industrial Expansion at Erwin, Tex.

Carolina, Clinchfield & Ohio Railway.

Johnson City, Tenn., May 4.

Editor Manufacturers Record:

Erwin, Tenn., will have a new hotel. The Erwin Hotel Co. has been organized with \$75,000 of paid-up stock. The officers are: L. H. Phetteplace, president; A. R. Brown, vice-president, and O. W. Guinn, secretary and treasurer. The plans have already been prepared by Clinton Mackenzie, architect, New York city, and the work of building the hotel will soon begin. The hotel will be built on the inn style and so designed that additions can be made as needed.

Erwin will have a new feldspar-grinding plant, the name and details of which are not yet available. This, with the two similar plants already located there, and together with the pottery and porcelain plant, make Erwin important in the pottery industry. In addition to its favorable manufacturing and distribution advantages, Erwin is near the source of the raw materials.

D. C. Boy, Industrial Representative.

Record Spring Wool Clip for West Texas.

San Angelo, Tex., May 4—[Special.]—The spring wool clip of Western Texas is the largest in the history of the industry, according to local dealers. It is estimated that approximately 4,000,000 pounds of the product will be stored here this season. At a recent sale of 90,000 pounds of long wool, spring clip, by the Wool Growers' Central Storage Co., a record price of 72 cents a pound was received.

An Estimate of Carranza and His Hostile Work in Latin America

By CHESTER T. CROWELL.

A history of Mexico under the presidency of Venustiano Carranza, if written by himself, would probably give four or five times as much space to the effect upon the Monroe Doctrine of his hostility to it as to his administration of internal affairs. No other ruler of a Spanish-speaking nation has ever attempted or accomplished so much toward twisting the Monroe Doctrine to mean the opposite of friendship to Latin America.

Misconstruction of the Monroe Doctrine has not been rare. While the policy of the United States toward the American republics has been under suspicion from the earliest days of our history, it remained for Venustiano Carranza to make a study of the record and to construe our every act as part of an unbroken chain of evidence proving not only an imperialistic determination, but a hypocritical duplicity.

There is no secret that the diplomatic and consular representatives of Mexico in Central and South America during the Carranza regime have regarded the dissemination of Carranza's point of view on the Monroe Doctrine as a duty of first importance.

This active propaganda has strongly affected public opinion in South America. Popular interest in the subject has been kept alive from month to month by the exchange of diplomatic notes between Mexico and Washington. If one will go back over the notes written by Carranza, having in mind what has just been stated, he will understand why Carranza's notes were usually so long and why they contained so much that was not germane to the specific issue. Our State Department has repeatedly addressed Carranza, and he has just as often addressed the Spanish-speaking nations on his favorite subject.

Carranza accomplished a great deal of what he set out to accomplish. In fact, he achieved a result so definite that it will not be wholly undone by the successful revolution against him. If one grant even half of Carranza's premise, his argument becomes almost unassailable. Carranza is an able diplomat. He writes well and he argues his case well enough to have convinced some citizens of the United States that their own country has enacted the role of scoundrel in its dealings with Latin America.

Little has been printed in the United States concerning these efforts that have done so much to disrupt the entente cordiale between our country and Latin America. That phase of the Carranza regime seems not to have attracted attention among American journalists. Perhaps it is because those activities are recorded in newspapers printed in the Spanish language, and few Americans can read Spanish.

Proofs that American prestige has suffered severely in Latin America come frequently. One of the most notable occurred recently, when Secretary of State Colby endeavored to pour oil upon the troubled waters of the dispute over Tacna and Arica between Chile, Peru, and Bolivia. His was the friendly utterance of a sister republic, but his intervention was resented.

The need for Latin-American unity is no longer debated in Latin America. The debate that is now active centers around a constitution for the proposed organization. Nothing definite has been accomplished as yet; it is not certain that anything will be accomplished. International organization is fraught with innumerable difficulties, but the general acceptance of the view that Latin America should stand together against an assumed aggressive attitude by the United States is questioned in but few quarters.

This is a matter of far more than academic importance. It bears a definite relation to our national security and to our foreign trade. International amity assumes an importance today that it probably never had before in the history of organized government. It is unfortunate for us that in such a period our prestige should have fallen so low, especially since it is the result of the efforts of a ruler who has probably received more proofs of American patience than any other Latin-American ruler.

Ever since Carranza was a struggling revolutionist the United States Government could have given a statement of reasons for intervention in Mexico which would have satisfied the civilized world. In spite of that, American public opinion has divided between two points of view; first, we do not wish to intervene if

we can possibly avoid it honorably; second, we will not intervene at all to protect either American lives or property.

Probably few Americans know that the term "Carranza Doctrine" means to the Spanish-speaking people of Latin America something as definite as "Article X" means to the people of the United States. The "Carranza Doctrine" is referred to with no explanatory phrase in the Spanish press of this hemisphere. Among other things, the "Carranza Doctrine" means that a foreign investor, when he enters a Latin-American country, should instantly agree that he has no right to appeal to his own Government, no matter what may happen to him. It is a doctrine never before advocated by any diplomat nor even advanced by any theorist. The basis for its promulgation is the assumption that the real purpose of an American investor is to provide an excuse for armed intervention.

Carranza pointed out to Latin America that when the United States was only a fringe of settlements along the Atlantic seaboard its acquisitive people were pushing back the Red man. He pointed out the Louisiana Purchase; the purchase of Alaska. He pointed out the War of 1848, previous to which Mexico was larger than the United States. He referred to Haiti, Santo Domingo, to intervention in Cuba, to the acquisition of the Philippines. He had his own pet version of the Panama Canal. Even the story of Cuba was made to read as a record of imperialism. This all led to the statement that American public opinion demands the seizure of Mexico and the violation of its sovereignty.

Carranza was an interesting example of the doctrinaire mind. He had a definite picture of the Yankee, and he was not open to new evidence. It did not occur to him that no other nation of more than 100,000,000 of people had ever attempted a republican form of government. It did not occur to him that no other republic had ever covered so vast an area as our own, nor that we are already engaged in an unprecedented experiment.

To him the United States was a close-knit homogeneous people with tremendous acquisitiveness, boundless wealth, restless energy, and no respect for the sovereignty of any other nation which had wealth they might wish to acquire. He did not speculate on the problem which might confront the United States if it achieved the dream he thought it cherished. No utterance of his indicates that he ever for a moment contemplated the insuperable problem Washington would confront if our Government held sway from the Great Lakes to the Amazon and beyond. He painted his picture of the grasping colossus of the North, and it coincides with the picture of the Yankee which had always been painted by the foreign propagandist in Latin America.

Personally, I think Carranza was sincere, but this made him the more dangerous. I do not think he ever doubted for a moment his moral right to tear up the Constitution of Mexico and impose a new one aimed to curb the foreigner even through retroactive measures.

It is entirely consistent with the character of the man that, in the face of all the proofs that Mexico was on the road to renewed disorder, he should have declared the opposite month after month. Such is the doctrinaire mind. All that he said about conditions in Mexico for more than a year, and all that he inspired others to say for him, all the declarations of confidence in his government, all the protestations that Mexico was on the road to security and prosperity and order and good government were swept aside in a day. The revolution for a restoration of right and justice has shown how false were his pretensions.

It did not occur to him that the things foreigners had done and were doing in Latin America had to be done. It did not occur to him that the failure of Latin America to do these things was an injury to the world. How great a burden Latin America could lift by bringing the world's production of metals back to normal! How tremendous would be the burden lifted if Latin America would develop her oil fields and supply the mercantile marine of the earth with fuel and the tractors with gasoline! What a great help it would be in these troubled days if Mexican railroads were paying good dividends and if other Mexican securities were at a

premium on the world's exchanges. The world would rejoice if Mexico owned all her own securities.

One hundred years before the Pilgrim Fathers landed at Plymouth Rock the history of Mexico begins. Long before the Red man of the North Atlantic States ceased to scalp the settlers Mexico had a university, possessed wealth and comparative peace.

The great prophet of Latin America will be the man who brings to those people technical and scientific education. They must have it. Guns could not protect them without it under modern conditions. Wherever the foreigners are busy in Latin America the nationals are learning. Foreign-owned industry is the best technical school they now have.

It would be interesting to know if the State Department of the United States realizes that the promulgation of the "Carranza Doctrine" was comparable in importance to his pro-German attitude during the World War—comparable in importance to the fact that during the entire period of his rule American citizens have been murdered with impunity in the territories that he controlled.

It is now ended, and a new era is dawning with prospects of being rational and liberal.

Better Car Movement in Elkhorn Fields.

Whitesburg, Ky., May 8—[Special.]—Improvement in the movement of coal cars into the Elkhorn and Hazard coal fields, along the Louisville & Nashville, is noted for the week ending today. Most of the mines were able to operate full time. Since May 1 the improvement has been gradual, and at least 90 per cent of the car supply is now coming into the coal fields of Eastern Kentucky, against less than 40 per cent for the week ending April 24. As a result of the improvement there is much satisfaction among miners and coal operators generally in the two important fields.

It is reported that the Louisville & Nashville promises steady full-time runs. At least 800 cars are said to have been allotted to the two fields, although it is doubtful if the Louisville & Nashville can operate that many cars and still run four passenger trains daily—two each way. It is seen now that in order to facilitate coal shipments in a satisfactory manner the double-tracking of almost the entire roadbed east of Ravenna, between Ravenna and McRoberts, is absolutely necessary.

Stoves and Ranges to Be Manufactured by Birmingham Company.

Birmingham, Ala., May 10—[Special.]—The Unit Stove & Furnace Co., a concern headed by Edward Leopold, retired business man of Belleville, Ill., recently acquiring the plant and site of the Birmingham Car Manufacturing Co. at North Birmingham, announces that first operations will begin May 17 and stoves, ranges, heaters and hot-air furnaces will be produced. William H. Tophorn is vice-president and superintendent; Elmer E. Leopold, son of Edward Leopold, secretary-treasurer; George Marsh, assistant superintendent, and Anton Meister, foreman. Employment will be given to a considerable force of molders, mechanics and laborers, and the products of the plant will be distributed throughout the United States. The concern was attracted to the Birmingham district by the advantages offered foundries, and especially stove works.

High-Grade Petroleum Transported by Tractor and Trailer System.

Cuevitas, Tex., May 6—[Special.]—Hauling crude petroleum by tractor and trailers from the producing wells in the western part of Zapata county, near here, to the railroad shipping point at Hebronville is now being done regularly. The distance is approximately 40 miles each way. The tractor hauls on each trip three large tanks, each containing 160 barrels of oil. The oil is obtained from a group of 30 shallow wells, averaging 160 to 200 feet in depth, and each having an output of 5 to 10 barrels a day. The product is very high grade. Many other shallow wells are to be drilled in the same locality. Four deep test wells are being drilled in that section. All of these wells are within 15 to 20 miles of the Rio Grande.

110,000-Barrel Oil Well Brought In by Texas Company.

Tampico, Mexico, May 5—[Special.]—Another recent stirring event in the oil industry of the Tampico region was the bringing in by the Texas Company of a 110,000-barrel well in the Chinampa field. The well was down to a depth of 2000 feet and was being bailed out when the column of oil tore loose, blowing the tools high over the derrick. Notwithstanding the big and powerful flow, the well was brought under control, and is now closed pending the installation of pipe line connection.

A river steamer and three barges have just been received by the Texas Company for use in river transportation. The steamer Panuco was built at West Lake, La., and will be used for hauling oil on the Panuco River. The barges are the Torkid, V and Daniel, built in the United States, and each having a capacity of 7500 barrels of petroleum.

The Huasteca Petroleum Co. has received derrick material and equipment for drilling 10 additional wells in the fields to the south of Tampico. It is stated that drilling operations will be started as soon as the derricks can be erected.

A new eight-inch water line is being laid by the Huasteca Petroleum Co., 50 kilometers of which already has been installed, and the work on this unit will be completed shortly.

A new 10-inch oil line will be laid between the company's terminal across the river and its camp at Cerro Azul. Twenty miles of the 10-inch pipe already has arrived, and the remainder will come as fast as the ships can transport it from Philadelphia.

Boiler capacity at each pumping station has been increased by 1200 horse-power, and the company is arranging to install two additional pumps at each station. When these additions are in and ready for operation, the company will be able to push through the pipe lines 135,000 barrels of petroleum daily. It is figured that this will be about the end of July.

The company plans to install three water-purification plants: one at its terminal across the river, the second at its Tacochin water station, the third at the Esperanza plant.

The new pipe line of the Cia. Metropolitana de Oleoductos, S. A., running from Tepetate to Palo Blanco and paralleling the company's old line, has been completed. The line is of eight-inch pipe, and extends a distance of 18 miles. With the completion of this line the company will have a daily pipe line capacity of 45,000 barrels of petroleum.

This company has made great progress in construction during the past year, and is fully equipped with pipe lines, terminals, re-loading berths and other requisites to handle exports of more than 1,250,000 barrels of oil monthly.

The Agwi Petroleum Co. has purchased material for drilling four additional wells in the Zacamixtle and Amatlan fields.

The Mexican Gulf Oil Co. is making good progress in the construction of its 10-inch pipe line from Tepetate to the company's terminal at Prieto, near Tampico. Two loops have been completed, one from Tepetate, 29½ kilometers in length, and the other from the halfway station at Horconitos, being 20 kilometers long. The new line parallels the company's eight-inch pipe line that was finished a few years ago, connecting Tepetate with Prieto terminal.

Work on the new refinery which the Continental Mexican Petroleum Co. has under construction is going ahead in a satisfactory manner. The preparatory work of grading, filling, driving piles and laying out the ground for the proposed buildings is well under way, and the site will soon be ready for actual construction of the refinery, machine shops, warehouses and other company buildings.

Tankage material and machinery to be used in the construction will begin leaving New York within the next 30 days, and it is expected to have the preparatory work sufficiently advanced to begin construction immediately upon the arrival of the material.

Initial Plans of Locke Insulator Works.

Plans have been filed for the initial buildings of the Locke Insulator Co., Victor, N. Y., which recently announced its purpose to build a \$500,000 factory at Baltimore. This plant will be equipped for the manufacture of pin type insulators, bushings and accessories for high voltage transmission lines. J. Henry Miller, Inc., Baltimore, has contract to erect the first unit buildings, costing \$319,000, as follows: 391x491 feet; 340x140 feet; 171 feet 10 inches by 109 feet 1 inch; each one story high.

Oil Well Five Miles South of Monroe Claimed to Indicate "Mother Pool."

Monroe, La., May 10—[Special].—A showing of oil has been discovered at the Rhymes No. 1 well of the Johnson Drilling Co. on the J. Harrison Rhymes farm, five miles south of Monroe, and although definite results from the well must await an actual test, oil experts who have flocked here on the strength of the showing say it appears that the Monroe company has discovered the "mother pool." Indications are that S. R. Humble and Jack Parker, Jr., composing the Johnson Drilling Co., both men born and bred in Monroe and novices in the oil game, may claim the honor of having discovered the first oil ever secured in Ouachita parish. So say geologists who have made close examinations. Since the showing was made some 5000 to 7000 acres of land in the vicinity of the oil well have been leased for oil and gas rights. Parker and Humble themselves before they made known the results of the strike took up 3000 acres. Scouts of all the big oil companies are here to make investigations.

Expenditures for carbon plants and gasoline factories in the Ouachita and Morehouse parish fields this year will amount to approximately \$6,000,000, according to a survey that has been made by representatives of industrial interests here. Twenty-three carbon plants are now in operation in the Ouachita-Morehouse territory and seven are in course of construction, and four to six additional plants will be built in this field at a later date, the survey states. Carbon plants are now being built by J. M. Huber at Swartz, by the Sterlington Carbon Co. at Sterlington and by the United Natural Oil and Gas Products Corporation at Cargan. The Monroe-Louisiana Carbon Co. is expected to build four plants near Sterlington, and the Associated Producing & Refining Co. will build at West Monroe. Gasoline plants are also being constructed by the United Natural Oil and Gas Products Corporation and the Sterlington Carbon Co. There are three gasoline plants in operation in the field at the present time, one by the Oscar Nelson Company of Louisiana at Lamkin, one by the Southern Carbon Co. at Fairbanks and one by the Southern Carbon Co. at Spyker.

Renewed Interest in Mexico Oil Fields as Result of Present Political Situation.

Monterey, Mexico, May 4—[Special].—As a barometer of the political situation in Mexico it is stated that the larger oil corporations operating in the Tampico fields have adopted plans for greatly enlarging their business in the matter of drilling additional wells and general handling of the product, in anticipation of the early overthrow of the Carranza regime and a removal of the harassing tactics that have been practiced against the oil industry during the last several years. According to information received here, all of the American companies have sent their representatives in Mexico ample instructions and authority to resume the drilling of new wells which has been suspended, or at low ebb, for some years, owing to unsettled conditions, as well as to renew the exploitation in general. Cables of the Mexican Petroleum Co. expressed an expectation of an increase of production by reason of the changed conditions, and urgent orders were issued for the immediate resumption of operations. The Mexican Petroleum Co. has ordered the immediate drilling of 25 wells upon its lands. It has ordered construction work to begin on laying two pipe lines, one 100 miles long, with 8-inch diameter tubing, and the other 70 miles long, with 10-inch tubing. The second of these lines will run direct from their holdings to the shipping points. The company also announces the shipping of 51 high-powered extraction pumps, and further instructs its plant to proceed at once to build 800 tanks for the storage of petroleum. Once these initial works are completed, it is expected that the company will be able to export 125,000 barrels per day.

Other advices received report the fact that the Pan-American Petroleum Co. has ordered the construction of 45 tanks.

The Standard Oil Co. has ordered the drilling of several new wells.

The Atlantic Refining Co. is drilling numerous new wells and carrying out a great improvement campaign. Other companies are showing renewed interest in Mexico fields, and much capital is being invested.

Heavy Nitrogen Content Found in Natural Gas Wells in Panhandle District of Texas.

Canyon, Texas, April 30—[Special].—Yancey C. McDaniel, assistant gas engineer of the United States Bureau of Mines, who came to the Panhandle region of Texas recently to investigate the natural gas production of the wells that have been drilled near here, found upon analysis that the natural gas which flows from the well in the Palo Duro canyon contains 97 per cent pure nitrogen.

This is by far the highest percentage of nitrogen content ever found in natural gas, it is stated. The discovery is regarded as of the greatest importance to chemical and agricultural interests, and will be especially valuable if it should be found that the other natural gas wells of this region are also heavily charged with nitrogen. It is possible to liquefy this product and make it available for fertilizing and for various chemical compounds.

The flows of the natural gas wells that have already been drilled in the Panhandle are said to be the largest of any in the world. According to a test made by Mr. McDaniel one of these wells has a capacity of 107,500,000 cubic feet a day with a rock pressure of 435 pounds. It has been demonstrated that the gas producing area is large and that the present developed supply is only a small part of what may be obtained by drilling additional wells.

The particular purpose of Mr. McDaniels' investigation was to learn by means of tests if the natural gas here contained helium in sufficient quantity to make the product of commercial importance. The finding of 94 per cent pure nitrogen in the gas that comes from the Palo Duro well was an unexpected discovery. As yet tests of the production of the other wells have not been made as to their possible nitrogen content.

It was not until 1877 that a process was discovered for liquefying nitrogen. Two scientists are credited with having made this discovery simultaneously, Cailletet of Paris and Pictet of Geneva. Until then nitrogen had been regarded as a permanent noncondensable gas.

If further investigation should prove the existence of nitrogen in the natural gas of this region to the extent that it was found in the Palo Duro canyon the discovery may have far reaching industrial effect. In its liquefied form it enters into many important compounds, such as ammonia, nitric acid, the cyanides, as well as being a constituent of all organized living tissues, animal or vegetable. It is interesting to note that this gaseous non-metallic element comprises four-fifths of the atmosphere by volume. That it should be stored in enormous, and perhaps inexhaustible, quantities in the depths of the earth and be brought forth and utilized as the demands may require is a provision of nature which has heretofore been unsuspected by scientists, it is asserted.

Conservation of Oil and Gas Forces Prohibition of Carbon Black Manufacture by Present Methods.

Amarillo, Tex., May 4—[Special].—As a means of still further conserving the natural gas supply of Texas, the oil and gas conservation division of the Railroad Commission has issued an order prohibiting the manufacture of carbon black by the method now in use.

Plans are under consideration by the Amarillo Oil Co. for the utilization of its enormous supply of natural gas, derived from wells in the Panhandle region. At a recent meeting of the stockholders and directors of the company, held here, the question of increasing the capital stock of the company from \$10,000 to \$5,000,000 was considered. Col. C. T. Herring, Thomas F. Turner and E. S. Blasdel were named to take up the matter of having the Legislature pass laws looking to better conservation of the available gas supply. The appointment of this committee came after discussion of the refusal of M. C. Nobles, president of the company, to consider an offer made by a carbon manufacturing concern to buy gas. Mr. Nobles explained that the carbon company would employ but three or four men, and would consume 12,000,000 to 14,000,000 cubic feet of gas a day, for which they would pay but two or three cents a cubic foot.

No Decrease in Influx of Mexican Laborers.

San Antonio, Texas, April 30—[Special].—It is stated by border immigration inspectors and customs officials that the influx of Mexican laborers to Texas is increasing instead of diminishing, but that these workers are absorbed into the various channels of employment almost as soon as they cross the Rio Grande. It is asserted by Roy Miller of Corpus Christi, secretary of the South Texas Land Owners' Association, that the protests made to the United States Government by union labor representatives against the temporary removal of the immigration restrictions so as to permit the free entry of Mexican laborers on the ground that they are not needed in Texas, are not well founded. Mr. Miller says that the labor shortage upon the farms and ranches of the State is acute and that unless laborers are obtained from Mexico there will be a big decrease of crop production.

Interesting facts in regard to the exodus of Mexican laborers to the United States were brought out in a recent investigation of the situation which was made by Capt. W. M. Hanson and agents of the Department of Justice and Immigration Service. Captain Hanson is special investigator of the committee of the United States Senate that has been looking into Mexican affairs. Much of the information in regard to the Mexican laborers came from employment agents.

C. Campa, one of the labor agents, said that the majority of these people are followers of Gen. Alvaro Obregon, presidential candidate, and that they are opposed to the Carranza administration, soldiery and officials. He bore out the statements of the others that conditions are frightful where Carranza officers are in control and that the soldiers frighten the ignorant peon into turning over everything that he has for the sake of his life. When they come to San Antonio the people are destitute. Mr. Campa has placed approximately one thousand men since February 1.

V. V. Bryant stated that last month his company shipped 1214 men from San Antonio and about 800 this month, some of these being sent to the State Labor Commissioner at Austin. He said that wages ranged from 30 to 60 cents a day in Mexico, and that conditions generally are bad. As a whole the people were better pleased under the Diaz regime, when they were paid approximately the same wages.

According to the sworn statement of S. E. Rix, many of the laborers when they arrive here have practically no clothes, no money and are often hungry. Some of them swim the Rio Grande and others are brought across in a boat. Mr. Rix did not know where these peons crossed the border. He said they came from all sections of Mexico and that none of them had ever said they had been lured here by labor agencies or by advertisements. In telling of the conditions under which these people lived in Mexico, he said:

"They say they can't do anything over there; if one side doesn't take it from them the other will, and they don't know one from the other; sometimes they don't know the Carranza people from the Villa people. They can have nothing—everything is taken from them; if they get a few dollars a bunch of those bandits will come along and take it away from them; they told me the Carranza people are worse than the Villa people. I have had several of them tell me that the Villa people would leave them something to eat, but the Carranza people will take it all."

He said that he had been told that the large property holders had given up agricultural pursuits to do nothing. They plant little acreage in crops because the crop is cut short while it is still green and under maturity.

It is for this reason that the peons are out of work. "You can go from here to Laredo," he continued, "and you will find every fifty to a hundred yards bunches of five and ten coming afoot, besides those that are coming in trucks and have money to pay their fares. The same conditions exist on the other roads coming into San Antonio."

Roscoe E. Burbank said that the Mexicans make a round of all the employment bureaus under the leadership of one who has been in this country for some time or has previously lived here, and they will accept the best proposition that is offered. They do not want to be separated. Some of these leaders bring the men from points in Mexico. Whether these leaders get a commission, he did not know.

Thomas Hart told of his talks with the laborers who had made application at the labor agencies. When asked why these

people come to this country, he testified the Mexican laborers are afraid Carranza or Villa will confiscate their properties if they work in that country.

According to M. L. Osborn the majority of the Mexicans coming here are from the states of Jalisco, Michoacan and Guanajuato. He has shipped several hundred to the North; some of them were women and children. He stated that he does not have agents in Mexico, nor does he have agents along the border to send the unemployed here. He did not think the reports that Americans in Mexico are sending these men here are true, nor does he believe that Mexican elements are bringing them here.

The majority of the Mexicans in Mexico have heard that exorbitant wages could be obtained in the United States, Mr. Osborn said. During the war many of the Mexicans came to this country and in a short time made a lot of money. Upon their return to Mexico they spread the news, and the idea of coming to the United States was born in the brain of the ignorant. This is the first time that they have endeavored to look into the situation or work on their idea, he said.

Further Consolidation of Coal and Coke Holdings.

Uniontown, Pa., May 4—[Special].—The third recent deal, involving extensive holdings of Fayette or Connellsville region coal and coke properties, was closed this week, when the two plants of the Tower Hill Connellsville Coke Co. were purchased by the J. H. Hillman Coal & Coke Co., with headquarters in Pittsburgh. The consideration was not disclosed.

The Hillman interests now have 23 mines, with an annual capacity of 6,000,000 tons, and the size of holdings and extent of operations is second only to the H. C. Frick Coke Co., making the Hillmans the largest of the independent companies operating in the Connellsville region. There are 1500 acres of unmined coal in the Tower Hill field and 714 modern coke ovens at the two plants. Control in the Tower Hill company was held by J. R. Nutt and associates of Cleveland, O. L. W. Fogg, general superintendent, is to retain that position, for the present at least, under the new owners, and he, together with W. W. Parshall of Uniontown, will be the local representatives of the Hillman interests.

Will Erect Garages for Use as Temporary Homes.

Birmingham, Ala., May 10—[Special].—The Birmingham Realty Co., the largest realty company in Birmingham, successor to the land company that established Birmingham, is making an offer to purchasers of lots in Norwood, one of the fashionable parts of the city, that assistance will be rendered in erecting what might be termed a garage later on, but at first will be used for residential purposes. When a lot is purchased the garage will be erected so that later on, when a more substantial home is built, the same can be used for a servant-house and garage. This will have the effect of relieving the housing problem somewhat. The scarcity of homes in Birmingham is still very acute. In several directions, just without the city limits, and in some instances in the city where there are woods, people are living in tents until better accommodations are obtainable. The proposed garages of the Birmingham Realty Co. will cost upwards of \$2000, will have modern conveniences and will be of great service to small families.

For Developing Florida Pine Timber Land.

Timber land totaling 59,560 acres in the southeastern part of Hillsboro county, on the Manatee-Sarasota branch of the Seaboard Air Line Railway, with a frontage of 10 miles on that railway, has been purchased by William Mizell of Folkston, Ga., and Arthur T. Williams of Jacksonville, Fla. Referring to this property, Mr. Williams writes to the MANUFACTURERS RECORD:

"It is all virgin timber, and is estimated to cut 200,000,000 feet of yellow pine. It was bought as an investment, and we expect to put it on the market within the next few weeks. Some 35 years ago, this timber was selected by my father, M. A. Williams, who had been Government surveyor in this State for many years, as being one of the best tracts of timber in Florida. This was before the State was developed and very little timber had been cut or turpintined."

THE IRON AND STEEL SITUATION

Readjustment Looked for in Steel Market.

Pittsburgh, Pa., May 10—[Special.]—While some railroad officials have continued to intimate that the rail strike would soon be over, the fact seems to be that transportation conditions in general are improving very little, indeed. Some progress is made as regards the iron and steel industry by the still greater use of solid through trainloads, but there is the influence in the other direction that day by day consumers' stocks of material have been getting smaller.

There is an economic loss to the country through the loss of production, not merely the loss of production of pig-iron and steel products, but the loss of production of the things that are made from pig-iron and steel. The latter loss is now the larger, because the consuming operations, on an average, add more than 100 per cent to the value of pig-iron and steel, and because the consumption is curtailed more than the production. Pig-iron is piling up at blast furnaces and steel products at steel mills.

While the rail strike involves an economic loss at the time, it exerts one favorable influence, in that it gives an excellent object-lesson that strikes are a bad thing. Thousands of men, as, for instance, employes at automobile factories in Detroit, are thrown out of employment, and these idle men do not feel particularly enthusiastic about strikes.

Pig-Iron Production.

The rail strike did not affect pig-iron production greatly during the entire month of April, the strike having only begun April 1, and then only in the Chicago district, the Youngstown district, for instance, not being seriously affected until about Monday, April 12. Pig-iron production in the month of April as a whole was at the rate of about 33,650,000 gross tons a year, this comparing with a rate of about 40,050,000 tons a year in March. There had been steady and large gains in the production rate since the low point of last October, when the rate was only about 22,300,000 tons a year, the main influence then being the iron and steel strike. Capacity under reasonably favorable working conditions, such as obtained prior to the last three or four months of 1916, is about 45,000,000 tons a year, and if really fair working conditions ever do return the capacity may be found to be somewhat in excess of this estimate. One may take 45,000,000 tons, however, as a fair basis for making estimates, and on this basis production in March was at 90 per cent of capacity, while production in April, as a whole, was at 75 per cent. At the middle of April, however, when the rail strike effects were the most pronounced, the rate was probably under 70 per cent. At the present time the rate is 75 per cent or perhaps a trifle more.

The report on ingot production for the month of April, compiled by the American Iron and Steel Institute, is not yet available, but it will probably show that steel production was curtailed in about the same ratio as pig-iron production.

Steel Shipments Increasing.

Taking the steel industry as a whole, or the central West, as the South and East are not materially affected in operation by the rail strike, shipments of steel in point of tonnage moved from mills are increasing. In occasional instances a mill has been able to ship more than it currently produced, so that it would reduce its stocks, but as a general proposition the accumulations of finished steel at mills are increasing.

The increased shipments of steel are only in point of total tonnage moved. The distribution to consumers is decidedly inequitable. The mills have no choice, but make shipments to the points that are open, and thus some consumers may be receiving more steel than they need, while other consumers may get nothing at all. Much of the steel movement to or through territory affected by the rail strike is by solid trainloads, either direct to large consumers or to classification yards that are open, whence single carload shipments are distributed. As the Western yards are open, a consumer in Iowa may be getting better shipments than a consumer in Ohio.

It may be estimated that by this time the consumption of steel is being restricted by the rail strike more than the production, as many consumers are without coal, even if they have supplies of

steel, while other consumers find their stocks of steel exhausted, steel meanwhile piling up at mills. The obvious effect of this will be to give the steel market an easier tone when the rail strike does end.

Steel Consumption Prospects.

Altogether apart from the influence of the rail strike, however, it is entirely obvious that the steel market is marked for a complete readjustment. Times like these are not times for a full consumption of steel. The railroads have made very light purchases of steel directly or of rolling stock and other things involving the use of steel, and the railroads show no disposition to buy with any freedom in the near future. There are few large projects on foot or being carried out involving the use of steel, and consumption of that sort was absolutely essential for a full steel demand even before the productive capacity increased fully 40 per cent, as it has done in the past five years. Export demand is of fair proportions, but anyone who counts upon export business engaging any large part of the American steel capacity has failed to consider the simple fundamental facts. What is a big tonnage outside the United States is a small tonnage in this country. The total iron and steel international business before the war, counting out movements between iron and steel-producing countries, averaged about 10,000,000 tons a year, or, say, one-quarter the present productive capacity of the United States.

What the country needs is a healthy readjustment whereby real work will be done and actual progress made, with reasonable costs of materials and of putting materials into use. It does no good for structural shapes for skyscraper construction to be cheap if the cost of bricks or installing plumbing fixtures is prohibitive. Steel makers are not saying much these days, but there is no doubt that a great many would really welcome a general business readjustment. The idea is not that all prices should come down, but that there should be an equalization, for some things are very much dearer than others. Steel prices, or at any rate the Industrial Board prices which the Steel Corporation strictly adheres to, are low rather than high when compared with the general average of all commodities. Thus it would probably be a good thing for the steel industry in the long run if there were a readjustment, even at the expense of slack operations for a few months. Such a view, of course, is not shared by the mills that have been keeping their order-books relatively clear and thus have been able to obtain very fancy prices on account of the early deliveries they were thus able to make.

The appearance of the steel market itself bears out the theory that a readjustment is on the way. Premiums for very early deliveries are decreasing. Prices for ordinary deliveries, say, in from two to four months, hold steady with occasional exceptions, but the bookings are well below the production, and thus even if quoted prices do not decline from month to month there is in essence a decline in values by the deliveries obtainable becoming earlier. As for the Steel Corporation prices, they are a solid basis for the market, and there is no indication that those prices will yield.

Pig-Iron and Coke.

The greatest restriction in pig-iron production is among the steel works furnaces of the Youngstown district. The detached merchant furnaces are operating moderately well, as is the Pittsburgh district. The by-product ovens are getting more coal than a week ago, through the greater use of trainload shipments, while the movement of Connellsville coke is about the same as it was 10 days or a fortnight ago, about 75 per cent of the rate just before the rail strike. Many of the merchant furnaces are piling pig-iron, while in the case of steel works furnaces the operation of the blast furnaces and the steel-making departments, respectively, is kept in harmony. Many foundries are operating at reduced rates, and a few are closed entirely, either from lack of pig-iron or lack of coke. The movement of foundry coke from the Connellsville region has hardly increased any in the past week, if indeed it has not decreased. While there is slightly better transportation, once a car is loaded, the supply of cars for loading foundry coke does not increase. The trainload movement of furnace coke to blast furnaces is a different thing, the trains simply going back and forth. With

little, if any, more coke offered in prompt lots, either furnace or foundry, and the avenues for shipment slightly enlarged, the market has stiffened about \$1 a ton, and Connellsville coke for spot or prompt shipment is now quotable at \$12 for furnace and \$13 for foundry per net ton at ovens.

Southern Pig-Iron in Strong Demand—Weakness in Scrap Iron and Steel Market.

Birmingham, Ala., May 10.—[Special.]—Southern furnace companies are beginning to ask more for their pig-iron, and a little tonnage (very few orders) has been booked at \$43 and \$44 per ton, No. 2 foundry, 1.75 to 2.25 per cent silicon. The general quotation is on a basis of \$42 per ton, while the Tennessee Company (Steel Corporation) has not changed its price of \$38 per ton, but has no iron worth mentioning to offer. An agency reports having sold during the past week one lot of 200 tons, practically spot delivery, on a \$44 per ton basis, while another lot of 300, and still another of 200, tons at \$43 per ton. The selling in this district lately has been equal to the make, and the delivery is but a little better than the production. Home consumption continues strong, and prospects are that the various plants in the Birmingham district and in the Southern territory will keep in full operation for several months ahead. There is a strong opinion here that the pig-iron market will hold its strong position for many months to come, with upwards of 60 per cent of the probable make of the last half of the year sold already. Some interests express a little fear that while the railroad strike and other interference with the steady operation of furnaces in the North, West and East is cutting down the pig-iron make, there is at the same time some interference with the consumption, and that when the one is able to resume its activities the other will also, so that the market will only be delayed. The Southern furnaces receive much attention when furnaces in other districts are unable to handle the business. Inquiries, however, are being received here for iron from various directions, and the statement is made that export business is being offered, with a little tonnage also booked at the average prices prevailing here.

Local consumption shows no wavering. The cast-iron pipe and sanitary pipe plants are all operating still to capacities, with new business being reported every week. Pipe shipments are being made as quickly as cars can be furnished. The foundries are very busy, and the recent visit of Agnacio J. Alsina and his partner, Suros, of Havana, sugar machinery and railway supply, will mean more of the immense sugar-machinery business if desired here. That the sugar-making business in Cuba was being developed beyond all expectations was the word given out, and the Birmingham district is being looked to for much of the machinery. The repair work on the machinery already in operation on the island is being offered the foundries and machine shops here, and there is reiteration that more sugar-machinery work will be done in this district than ever before. Cottonseed-crushing-machinery also in great quantity is being done, preparing for the 1920 seed crushing. Weather conditions in Alabama and Georgia have been such so far that cotton growers are greatly alarmed now as to the probable crop. Rain has been almost incessant during the spring, and in this State, Alabama, there is a delay of from three to six weeks on planting, with but a small percentage of the preparatory work done.

The plant of the Gerson Rolling Mill Co., at East Birmingham—which employs about 40 men and gets out a tonnage of iron bar around 35 to 40 tons daily, has been started up again after several months' shutdown. It is announced there are a number of orders in hand, and the operation of the plant will be for a considerable period ahead.

Progress on the plant of the Birmingham Pipe and Fitting Co., at Gate City, to make sanitary pipe and fittings, has been such that expectations are the little industry will be producing pipe within the next 30 days.

Practically every foundry and machine shop in the Birmingham district has undergone some development in the last 12 months. The Joubert & Goslin plant has a very large addition; the Birmingham Machine & Foundry Co. has rebuilt the portion of the plant destroyed by fire several months ago, building larger and more conveniently; the Dixie Brass & Foundry Co., the Hardie-Tynes, and many others, large and small, have been

making additions from time to time. Labor is quite satisfactory in the machine shops and foundries and all worked on the open-shop plan.

All steel plants in the Birmingham district, those manufacturing steel and working their own product and those fabricating steel, are well supplied with orders and are working on full time. Commercial work in fabricating plants is very strong, and the prospects are bright, it is stated. Steel shipments from the Birmingham district to the shipbuilding plants in Mobile by rail and water, Warrior River, are steady and increasing.

Coke demand in Alabama is strong, and those able to take on new business are finding no trouble in getting the highest prices obtaining. Sale was made by a local coke producer here recently for shipment into the St. Louis territory on a basis of \$12.50 per ton, 72-hour foundry coke, and the intimation was given that further business would be placed if acceptable. There was no denying that coke of other sections was quoted at \$15, f. o. b. ovens, and the difference in freight rates would not offset the difference in the original price. The output in this district is to be materially increased the latter part of the month or the first part of June, the remaining 60 ovens of the by-product coke plant of the Sloss-Sheffield Steel & Iron Co. to be started up. The 60 ovens of this plant, now in operation a little over three weeks, have been doing nicely in the way of production, and there is need for the product. The repairing of by-product coke ovens by the Tennessee Coal, Iron & Railroad Co. at Fairfield and by the Woodward Iron Co. at Woodward will be pushed so there can be a full production at both places. Inquiries are being received from various directions as to coke, but there is no anxiety to book too much business, and there is apprehension as to ability to deliver, the scarcity of cars with which to move the product being a problem. Local needs for coke are large, but are being met promptly. The Semet-Solvay by-product coke-oven plant at Ensley is still being operated, with coke being produced for two or three consumers of the district, coal being furnished by these consumers. The Alabama By-Products Co., the 50-koppers by-product plant of Morris Bush and associates at Boyles, just outside the city limits of Birmingham, is selling a little coke on the open market, in addition to assisting iron companies here with the product. There is a good market for all the other by-products, tar, sulphate of ammonia, benzol, etc.

The coal production is being held down by reason of railroad-car shortage. A number of mines along one of the railroads of this district are complaining loudly of the car shortage, and it is still to be heard that those mines not furnishing railroad company coal are really suffering by reason of no transportation. With one exception, railroads of this district have placed their contracts for fuel for the next 12 months, and in some instances for a longer period. Every contract calls for a larger amount of coal than was taken before. Of course, all prices are above what they ever were, and the contracts provide against strikes and further labor advances. The coal production for the week ending May 8 will probably be what it was the previous week, 306,836 tons, which compared to 323,108 for the week ending April 24 and 326,991 tons for the week ending April 17. Labor is showing no discontent right now, and leaders are claiming that their contracts, which are a little different to those prepared by the coal operators, are being signed up. There is very little evidence, if any at all, that there is a closed-shop idea obtaining in any section of the district. Collective bargaining is not asked for in either of the contracts, though the union leaders claim that they hold the right of belonging to an organization and attending meetings of the organization without interference of the operators. The main difference in the two contracts in the mining section here is that the miners' organization claims that the commission named by President Wilson to investigate the conditions in the bituminous coal field awarded an advance of \$1 per day to the day laborers, whereas the operators have advanced all wages 27 per cent as compared to wages in effect October 31, 1919.

The shipments of coal on the Warrior River show no abatement. It will be 90 days before the self-propelled barges will be delivered, and the steel towboats will probably be started to the river here a little before that time. There is need for a large quantity of coal at Mobile and New Orleans. A little shipment, a few thousand tons of coal, is being shipped to France from this district, but apparently no effort is being made to get export business either in coal or coke until the market at home has been supplied. The car situation is just as bad in handling the export

business as the other. Home consumption of coal is very large. There has been no chance as yet to lay in coal to provide against emergencies that might be felt next winter. Several mines in the western part of the Birmingham district lost two and three days' operation the past week by reason of not enough cars with which to care for a full day's mining. Operators continue to issue advice that consumers begin at once laying in coal, but, as stated above, the advice cannot be put into execution with coal production showing a deflection by reason of the car shortage in the district.

The scrap iron and steel market is beginning to show weakness in the Birmingham district, and prices will descend if there is not some bolstering up pretty quickly. The largest consumer of heavy melting steel is out of the market entirely, and no quotation is mentioned of that product. Cast scrap is holding its own, and inquiry reveals sales which will call for delivery for several weeks yet to come. Mixed country scrap can be bought liberally, but dealers assert that the tight money market is being felt; in other words, the financial end of the business is not so lenient as it has been. There is no doubt that the cast scrap market will be good as long as the pig-iron market continues strong. That means for an indefinite period. Shipment of scrap is still with cars that are used in bringing in old material, but with the buying in of scrap there soon will be difficulties experienced in making deliveries. Dealers in scrap iron and steel in this district are beginning to show some apprehension as to the market conditions, and their alarm is not being withheld. Reports from other districts indicate that the scrap business is also very quiet. Stocks will not be kept up to the standard that was noted here during the past several months, that is, so far as the amount of stock on hand. Contracts will be covered satisfactorily. The cast demands will be met right along.

Pig-iron and steel scrap quotations in the Birmingham district are as follows:

FIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$38.00 to \$42.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$40.00 to \$43.60; iron of 2.75 to 3.25 per cent silicon, \$42.20 to \$45.20; basic, \$40.00 to \$41.00; charcoal iron, \$55.00, f. o. b. furnaces.

OLD MATERIAL.

Old steel axles.....	\$30.00 to \$31.00
Old iron axles.....	29.00 to 30.00
Old steel rails.....	21.00 to 23.00
Heavy melting steel.....	20.00 to 22.50
No. 1 railroad wrought.....	21.00 to 22.00
No. 1 cast.....	30.00 to 33.00
Stove plate.....	28.00 to 30.00
Old car wheels.....	28.00 to 30.00
Old tramcar wheels.....	29.00 to 31.00
Machine shop turnings.....	13.00 to 15.00
Cast-iron borings.....	13.00 to 15.00

Coal and Coke Production Hampered by Railroad Strike.

The production of soft coal continued to recover slowly during the week ended May 1, but was still 16 per cent below the average during the first quarter of the year, according to the United States Geological Survey. The total output, including lignite and coal coked at the mines, is estimated at 8,898,000 net tons. This was an increase of 413,000 tons over the preceding week, but was 2,117,000 tons less than that of the last week in March.

The cause of this continued depression was the railroad workers' strike, which delayed movements at the most important rail gateways and junction points from St. Louis and Chicago to Buffalo and New York.

The persistence of the railroad strike has widened the difference between the cumulative production of the present year and the record of the war years, 1917 and 1918. The year 1920, although 33,500,000 tons ahead of 1919, is nearly 7,000,000 tons behind 1917, and about 9,000,000 behind 1918.

A substantial recovery marked the production of anthracite during the week ended May 1. Shipments originated by the nine principal anthracite carriers were 34,882 carloads, the largest since the week of March 27. On this basis the total output is estimated at 1,792,000 net tons, an increase of 174,000 tons, or 11 per cent.

The cumulative production from the beginning of the calendar

year to May 1 was 27,731,000 net tons, an increase of 2,613,000 tons over the corresponding period of 1919.

A further slight recovery marked the production of beehive coke during the week ended May 1. The total output, as indicated by shipments originated by the 26 principal coke-carrying roads, was 373,000 net tons, as against 342,000 tons in the preceding week. In spite of the 9 per cent increase, production was only three-fourths of that of the last week in March. The interruption to transportation caused by the switchmen's strike was the cause of the decrease.

Production in the Connellsville region, according to the Connellsville Courier, was 176,775 tons, an increase over the week before of 22,960 tons, or 13 per cent.

The cumulative production since the beginning of the calendar year now amounts to 7,388,000 tons, or within 15,000 tons of that of the corresponding period in 1919.

Discussion of the proposed legislation to establish seasonal freight rates on coal has lent importance to the statistics of distribution, particularly to the relative volume of interstate as opposed to intrastate movement.

In 1918, 209,000,000 tons, or 36 per cent of the total production, were used within the State of origin for purposes other than railroad fuel. All-rail deliveries to railroads for fuel use amounted to 149,000,000 tons, or 26 per cent. A portion of this tonnage—how much is not known—is revenue freight delivered by the coal-originating carriers to other carriers who must purchase coal outside their own lines. Some of this railroad-fuel coal delivered by one road to another may be interstate business.

Of the 11,000,000 tons exported by rail, 98 per cent crosses State boundaries before reaching the frontier, and is therefore interstate business.

Of the 28,000,000 tons shipped to the Lakes for cargo, about two-thirds, all except the movement from Ohio fields to Ohio lake ports, and from Pennsylvania fields to the Pennsylvania lake port of Erie, is interstate business.

Of the 45,000,000 tons moving to tide, considerably over 85 per cent is interstate business.

In general, the experience of 1917 and 1918 indicates that the bituminous coal moving as revenue freight in interstate commerce is something over 35 per cent of the total output. This figure does not include railroad fuel coal.

Program for General Meeting of American Iron and Steel Institute.

The Seventeenth General Meeting of the American Iron and Steel Institute will be held at the Hotel Commodore on May 28, 1920. There will be a morning, afternoon and evening session. The program for the meeting will include the following papers:

Address by the president, Robert H. Gary, chairman, United States Steel Corporation, New York.

Industry's Need of Oil, George Otis Smith, Director United States Geological Survey, Washington, D. C.

Welfare Work in the Metal Industry, Charles L. Close, manager Bureau of Safety, Sanitation and Welfare, United States Steel Corporation, New York.

Fatigue of Metals Under Reheated Steels, H. F. Moore, research professor of engineering material, and J. B. Koppers, research associate professor of engineering material, University of Illinois, Urbana, Ill.

The Future of Oxygen Enrichment of the Air in Metallurgical Operations, F. G. Cottrell, Bureau of Mines, Washington, D. C.

The Microscope and the Heat Treatment of Steel, Albert Sauveur, professor of metallurgy, Harvard University, Cambridge, Mass.

A Method of Producing Pipeless Rolled Products from Annular Blooms, C. A. Witter, Provident Engineering Co., Philadelphia, Pa.

The Acid Open-hearth Process, B. De Mare, superintendent open-hearth department Midvale Steel & Ordnance Co., Philadelphia, Pa.

Alabama Pig-Iron Production Shows Increase.

Birmingham, Ala., May 10.—[Special].—Pig-iron production in Alabama for the first four months of this year is stated at 786,095 tons by semi-authoritative figures, against 704,412 tons for the same period in 1919. The furnace output in Alabama in April was only 191,492 tons, which compared to 149,536 tons for the same month in 1919 showed an increase, but a decrease was noted in comparison with the production in March, 1920, when 204,882 tons was reported. The May production promises to exceed that of March.

NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

What a Difference Now in the Attitude of the Banks on Liberty Bonds.

J. R. CARY, AUBREY HAWKINS (Successor), Richmond, Va.

Everybody knows we were assured when we were making the Liberty Loan drives that it would be a poor day for our country when Liberty bonds would not be acceptable collateral.

We were promised by our banks that we would be carried indefinitely at a reasonable interest rate, and when we offered to take what we thought we could pay for, many of us were called before our bank officials and the result was we doubled, with their positive assurance they would carry us as long as we desired.

Money is quoted today in New York at 10 per cent.

Our banks are calling harder than ever on Liberty loans, with the result some of us are getting scared out and forced to sell in order to avert a long argument every time the notes come due. They started renewing our obligations for 90 days; they now renew for 30 days, making a little extra discount every time the whip cracks, and tell us they are having so many calls for money they do not think they can carry us much longer, as much as they would like to (???).

They told us that our Liberty bonds would be acceptable as collateral when everything else was gone to the bow-wows.

The Federal Reserve Bank is not only instructing its member banks to call hard on Liberty loans, but also they must not loan money on real estate, nor are they permitted to loan money on Liberty bonds already paid for and held in safety vaults when offered for collateral.

What happens now:

A sawmill man; active; working himself every day in the week, induces others to work, encouraging them to work longer hours and produce **more lumber**, which goes into **houses, homes, railroad cars, bridges, factories, ships.**

This same man, in order to get a fine tract of timber, has to buy land and all; it's a bargain; he engages to take it. Goes to his bank to borrow money on same and is refused because **the Federal Reserve Bank has ordered it.**

Happy thought; he tells the credit man. "Well, you just go to my safety box and get the \$5000 in Liberty bonds you induced me to take," and imagine his disappointment and disgust when the bank man shows him a letter received from the Reserve Bank instructing them to discourage loaning money on Liberty bonds as collateral.

If this happens in one little county in Virginia, can it be happening all over? Is it within the imaginative power of anyone to comprehend a situation like this?

What authority or right has the Federal Reserve Bank to discriminate between good collateral offered? Were they brought into existence to serve any particular kind of business, or the country as a whole?

Manufacturing Furniture from Florida Native Palms.

D. L. RUSH, Manager Rush Bros., New Port Richey, Fla.

The Palm Products Co. is a new firm in New Port Richey, Fla., composed of men from Cleveland, O., who are entering into the manufacture of high-grade decorative furniture and other decorative materials from the native palms. They are turning out a fine grade of stand electric lamps, tables, flower stands, lamp stands and other articles of furniture from the leaves and stems of the palms and are manufacturing artificial palm leaves for the artificial palm trade and a high-class brush from the saw palmetto roots. They are in the market for looms to weave wood splits, such as used for chair bottoms, steaming and bending machinery and appliances, split making and cutting machines and light wood-working machinery; also one to three horse-power three-phase motors.

We would like to hear from people with such machinery for sale.

Anti-Trust Legislation Should Be Applicable to Organized Labor as Well as Industry.

WALTER E. GARDNER, Traffic Manager Georgia-Florida Sawmill Association.

The inflexible rule of supply and demand regulates prices and fixes values, and no agreement, understanding or combination can more than temporarily influence the workings of that immutable law. The Government has laid its iron hand upon capital and industry, to the end that monopolies might be prevented, competition encouraged and the law of supply and demand be given full play, but the legislators have at the same time defeated the purpose of the anti-trust laws by granting immunity to labor and farm organizations.

The law of demand is more stable and less susceptible to influence than the law of supply, and the law of supply is therefore the potent factor in establishing values and controlling unreasonable profits. This fundamental and price-controlling law of supply is in the hands of labor, and yet the Government not only permits labor to form combinations and enter into agreements to fix the prices of the services they have to sell, thus removing all competition and placing a premium upon inefficiency, but they are allowed to combine without regard to law and order and without any financial responsibility to enter into conspiracies to tie up the industries of the country if their demands are not met, no matter how unreasonable they may be. The unrestrained labor trust in the hands of their radical and characterless leaders has placed the laborers themselves in a state of involuntary servitude more dangerous and more certain of disaster than any anti-strike legislation Congress might enact, and the curtailment of production as the result of strikes since the signing of the armistice has created a vicious circle of high prices in a year's time that could not be equaled in a generation by capital and industry if the Sherman law was not on the statute-books.

The employe has a commodity to sell—his services; the employer has a commodity to sell—the product of labor. What is there so unholy about industry and what is there so sacred about labor that the laws of the land should not apply to both with equal force? What halo is there around the heads of organized labor that they should be exempt from the operation of the anti-trust laws, and be permitted to enter into conspiracies in restraint of trade and commerce? We are now reaping the fruits of this kind of class legislation, and it is about time for Congress to wake up to the fact that we are rapidly coming into class rule in this country, which will inevitably lead to the destruction of our American institutions and finally the Government itself.

Would Make Liberty Bonds Acceptable for Government Taxes at Par.

D. H. WINSLOW, Managing Editor Everywoman's Magazine, Inc., Raleigh, N. C.

The Constitution of the United States provides that full faith and credit shall be given to all public acts. We are guaranteed by Government agents, who sold the bonds at public meetings, that if we would "buy to the limit, and buy until it hurt," the banks would cheerfully lend us money at 6 per cent and the Government would pay 4½ per cent, and that we would only lose \$17.75 per \$1000 by helping to lick Germany.

It is the failure of the Government to keep faith with the people according to its own agents that is producing socialism and a general unrest among those who assumed that the Government's agents' word for it is as good as their bond.

Regardless of the effect on prices, I am willing and ready to buy another issue of bonds whenever I am guaranteed that those I now hold and that those I buy will be accepted for Federal taxes at 100 cents on the dollar.

Good Roads and Streets

Five-Year Good Roads Program for Arkansas Calls for Improvements Costing \$108,000,000.

The total mileage of improved roads authorized under general and special legislation of the Arkansas State Highway Department is 9000 miles. The present program contemplates the construction of this work during a five-year period. The estimate cost of the improvements is approximately \$108,000,000.

The status of the work upon the 9000 miles of highway is as follows:

	Miles.
Construction completed.....	300
Under construction or contract.....	4,300
In various preliminary stages of organization.....	4,400
Total.....	9,000

Of the work under contract and construction, the following summary shows the mileage of the various types of surfacing:

	Miles.
One course Portland cement concrete.....	192
Asphaltic concrete on stone or concrete base.....	623
Penetration macadam.....	460
Water-bound macadam.....	560
Gravel road.....	2,209
Earth.....	250

The cost of this work varies from \$3000 per mile for the cheapest-graded earth road, with drainage structures, to \$58,000 per mile for a 20-foot concrete surface on a 30-foot roadbed. The total estimated cost of the 4300 miles under contract is \$56,000,000.

The total aid available for the five-year period, 1917-1921, is as follows:

State aid.....	\$1,400,000
Federal aid.....	4,615,210
Total.....	\$6,065,210

These funds are allotted to the various roads that can comply with the State and Federal aid requirements. There are at present about 225 projects approved for aid.

In Arkansas neither the State nor county can issue bonds. The work is done by the organization of improvement districts, usually embracing an area extending about three miles on each side of the road to be improved. These districts have a Board of Commissioners, which appoints the engineer and other employees and has direct charge of the work. If the district is granted aid, the law and regulations require approval of plans, specifications and estimates by the State Highway Department, which also makes inspections of the work during construction and before any money is paid out upon the estimates of the district engineer.

Contracts Awarded for First-Class Highways in Jefferson County.

Birmingham, Ala., May 10—[Special.]—The Board of Revenue of Jefferson county, of which Birmingham is the county-seat, is making active plans for permanent road building, contracts being let for construction of first-class highways through the county. Last year several contracts were let for what might be termed patching of roads, though the construction was to be of first-class work. Bids were called for recently, and during the past week contracts were awarded for 36½ miles of paved highways in the county at a cost of \$1,137,561.56. Sheet asphalt paving, with a concrete base varying from five to six inches, will be laid on the roads. The Board of Revenue had the co-operation of a citizens' advisory committee in examining the bids and awarding the contracts so that as far as possible the lowest and best bids could be accepted. It was with a view to permanency that the contracts were let, and the belief is expressed that within 12 months, when the work will be nearing completion, Jefferson county will have one of the best systems of good roads in the country. It is asserted that this is far from being a completion of the program in mind, three projects being advertised now and contracts for upwards of \$800,000 more work will be awarded June 7.

The contracts just let were for roads radiating from Birmingham and Bessemer, the two larger cities of the county. When this work is completed it will give two permanent roads between Birmingham and Bessemer and will connect Birmingham with Ensley,

Mt. Pinson, to the north in a great farming section, go through Pratt City, a mining section, to the Walker county line, connecting with the Jasper road; to the county-seat of Walker county, also a great mining and farming section of the State, and to Iron-dale, a few miles removed from Birmingham in the northeastern part of the county. The work to be let in June will connect Birmingham with mining sections toward the Warrior River.

The people of Alabama are anxiously watching the actual carrying out of plans for good roads, voting a few months ago for a big State appropriation. Jefferson county is taking a prominent lead in the general plans.

War Department's Motor Convoy to Traverse Southern States.

Plans have been completed whereby the War Department will send a motor convoy from Washington to Los Angeles over the Bankhead National Highway on or about June 15.

The convoy will be under the supervision of the Motor Transport Corps, and will consist of a motor transport unit complete, at war strength, one service park unit, at war strength, detachment from Engineer Corps, and detachment from Medical Corps. All motor trucks will be 1½ tons capacity, equipped with pneumatic tires.

The tour will pass through Virginia, North and South Carolina, Georgia, Alabama, Mississippi, Tennessee, Arkansas, Texas, New Mexico, Arizona and California.

The purpose of this and other overland trips will be to study the handicaps which surround the transportation needs of the army on account of the lack of dependable and definite systems of highways; to secure data relative to the use of various types of motor vehicles; to secure relative data on solid and pneumatic tires; to train officers and men in extended field operations, and to recruit personnel for the various branches of the army.

Providing for Highway Bridge Across Tennessee River at Albany-Decatur.

Decatur, Ala., May 6—[Special.]—With the quota from Decatur and Limestone county already provided for the highway bridge across the Tennessee River at Albany-Decatur, early construction of the bridge is practically assured.

Prominent business men of Decatur met Tuesday afternoon and underwrote Decatur's quota of \$100,000. At the same time C. E. Frost, Athens banker, telephoned that he would underwrite Limestone's quota of \$75,000. The business men who agreed to guarantee Decatur's \$100,000 quota were S. W. Irwin, J. D. Wyker, Jones Cotton Co., Clyde Hendrix, D. S. Echols, J. W. Clopton, Wilbur M. Bailey, LeRoy McEntire, P. Ballas, J. P. Brock, J. R. Daniell, T. E. Pride, T. M. Dix and Boggs Bros.

Completion of the highway chain planned for North Alabama and the construction of the highway bridge across the Tennessee here will give the Tennessee Valley one of the strongest links in the highway system of the South, and will permit tourist travel in every direction through the valley. It is predicted that construction will begin within the next eight weeks.

Highway Transport Movement Making Progress at Louisville.

Since the completion of a central freight depot and the purchase of three large, well-established motor-truck lines by the Union Transportation Line, Louisville, Ky., claims one of the best-equipped highway transport organizations in the country.

The company began operations only six months ago, and planned to establish 7 main and 47 secondary routes, covering 136 towns, all within a radius of 75 miles of Louisville. Five of these main routes are now in operation. The company now owns more than 20 trucks, which carry to the small inland towns all the merchandise made, distributed or sold in Louisville and bring back to the city merchants livestock, grain, green groceries and all other farm products. Trucks leave the Louisville depot twice daily. This service has been the means of saving shippers money by decreasing the time of delivery. In addition to time service, the company gives a door-to-door service, something that is not done by any carrier other than express.

RAILROADS

Proposed Line Down the Rio Grande.

San Benito, Tex., May 8—[Special.]—At a meeting here of representative business men of San Antonio, Brownsville and other towns in the Lower Rio Grande Valley, preliminary steps were taken to organize the San Antonio & Rio Grande Valley Railroad Co. to build a railroad between San Antonio and Point Isabel, an undeveloped deep-water port near the mouth of the Rio Grande, about 300 miles via Roma, and thence down the river valley. The cost of constructing and equipping the line will be about \$6,000,000, it is estimated. The company will have a nominal capital stock of \$300,000. Large donations of land and money along the route are said to be assured. Common stock is to be paid for in cash. Until a permanent organization is formed five trustees from San Antonio, five from the valley and one from the intervening territory are to conduct business and ask for a charter. Albert Stevens was elected from San Antonio and was authorized to choose four others from that place. Lawrence R. Brooks of McAllen was elected to serve for the valley and also to choose four others. Frank H. Burmester of Tilden was elected to represent intervening territory.

New Equipment, Etc.

Baltimore & Ohio Railroad Co., to carry out its plans for rebuilding freight equipment, has ordered 1200 steel hopper car bodies from the Pressed Steel Car Co. and 1000 boxcar bodies from the Mount Vernon Car & Manufacturing Co. This railroad is now reported in the market for some passenger-train cars.

Oklahoma Southwestern Railway, G. E. Matt, Miami, Okla., auditor and treasurer, is reported in the market for equipment.

Orders for bridge steel recently placed include the following: Baltimore & Ohio, 300 tons; Norfolk & Western, 600 tons, all from the American Bridge Co. Southern Railway has also ordered a double-track steel bridge, to span the Ohio River at Cincinnati, from the same builders.

Seaboard Air Line, according to a report from Jacksonville, Fla., will have 10 large locomotives overhauled and repaired at the shops of the Merrill-Stevens Shipbuilding Corporation of that city, which is also said to be preparing to repair freight cars, as well as to take orders for building new cars.

Appointments.

James U. Jackson has been appointed industrial agent of the Georgia Railroad, with offices at Augusta, Ga., the appointment being announced by E. S. Center, manager of commercial development. H. H. Bell has also been appointed land industrial agent of the railroad.

S. A. Stockard has been appointed general superintendent of the Atlantic Coast Line Railroad to succeed the late J. T. King. He was formerly assistant to the general superintendent.

Road to Be Sold.

The Arkansas & Louisiana Midland Railroad is to be offered at receiver's sale on June 8. The line is 52½ miles long from Crossett, Ark., via Bastrop, La., to Monroe, La. It is expected that part of the line from Bastrop to Monroe, 22 miles, will be kept in operation, but that the track on the remainder will be taken up.

Offices Reopened.

The Seaboard Air Line has reopened its freight office and its passenger office in the Continental Building, Baltimore, with C. E. Thomas, general agent; J. D. Dawson, commercial agent, and J. B. Brown, district passenger agent.

Change of Name.

At a recent meeting of its board of directors the Fernwood & Gulf Railroad Co. decided to change its name to Fernwood, Columbia & Gulf Railroad Co., and the charter was amended accordingly. The offices are at Fernwood, Miss.

Abilene Railway to Be Improved.

An agreement is reported at Abilene, Tex., between the city government and the American Public Service Co., under which the latter will take over and operate the street-railway line there. Improvements are also to be made, these including repairs to track, transmission lines, power plant and equipment. Estimated cost of work, \$60,000. The American Public Service Co. is represented in Texas by A. Hardgrave, Southwestern Life Building, Dallas, Tex.

Going After Southern Business.

W. H. Mitchell has been appointed Southwestern freight agent of the Baltimore & Ohio Railroad, with headquarters at Atlanta, Ga., having several traveling freight agents reporting to this office.

TEXTILE

The Cotton Movement.

In his report of May 7, 1920, Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 281 days of the season was 11,139,134 bales, an increase over the same period last year of 1,112,158 bales. The exports were 5,708,903 bales, an increase of 1,656,333 bales. The takings were, by Northern spinners, 2,174,315 bales, an increase of 304,877 bales; by Southern spinners, 3,087,098 bales, a decrease of 116,643 bales.

Brandon Mills to Build Addition.

An additional plant will be built by the Brandon Mills, Greenville, S. C., the equipment of machinery to include 8000 spindles. The new mill will be of reinforced concrete and mill construction, two stories high, 265x132 feet, to be equipped for manufacturing cotton duck. There will also be built a two-story 100x100-foot warehouse, and a steam-power plant will be installed. J. E. Sirrine is the engineer-architect in charge, and the Fiske-Carter Construction Co. is the contractor.

For Two Hosiery Mills in Virginia.

Contracts have been awarded to erect the buildings for two of the hosiery mills to be established in Virginia by the F. Y. Kitzmiller Company of Reading, Pa. At Big Stone Gap the building will be a one-story 640x50-foot structure, and at Gate City it will be one story, 200x50 feet. The Berks Construction Co. of Reading and Big Stone Gap is the contractor for both buildings.

Wood Hosiery Mills Incorporated.

Cotton hosiery will be manufactured at Bristol, Va., by the Wood Hosiery Mills, capitalized at \$50,000. This company has been organized with these officers: J. H. Wood, president; J. L. Wood, secretary; G. E. Nickels, treasurer; all of Bristol, Tenn.

Textile Mill Notes.

An increase of capital to \$1,000,000 has been announced for the Saxon Mills, Spartanburg, S. C.

An increase of capitalization from \$1,500,000 to \$3,000,000 has been announced for the Marlboro Cotton Mills, McColl, S. C.

An increase of capitalization from \$1,750,000 to \$5,000,000 has been announced for the Woodside Cotton Mills Co., Greenville, S. C.

The Rabell Manufacturing Co., Selma, N. C., plans to increase capital from \$150,000 to \$250,000.

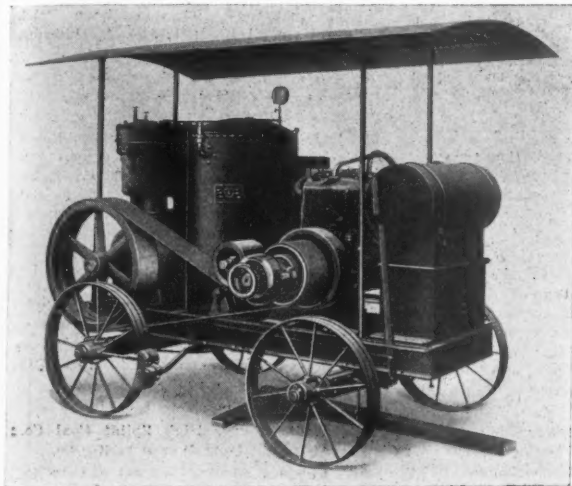
An increase of capital from \$50,000 to \$100,000 has been announced for the Star Knitting Mills, Memphis, Tenn.

J. E. Kanipe and associates have organized the McDowell Hosiery Mills, Marion, N. C., purchased building and ordered machinery.

Organized with \$40,000 capital, the Talladega (Ala.) Knitting Mills succeeds the Hicks Hosiery Mill. C. N. Lanier is president and A. W. Hardin is manager.

New Light-Weight Air Compressor.

Developed expressly for the use of contractors, the portable air compressor illustrated here shows by its strong, compact appearance that careful consideration has been given by its designers to every detail of its construction. It is a unit in which is combined great capacity with light weight, and it, therefore, meets the demand, created by the increasing use of pneumatic tools for road building and other construction, for a machine easily moved about and yet capable of a large output, with strength requisite for any demands that may be put upon it. It is constructed of the



THE COMPRESSOR AND ENGINE AS MOUNTED.

highest quality materials, and with proper care will last as long as the most exacting man could desire. It is made by the Chicago Pneumatic Tool Co., and it meets requirements for a portable compressor lighter than the other machines of the same make, to which line it is supplementary. It is known as "Class P."

A description of this new compressor says that the air end consists of a two-cylinder, single-acting, vertical air compressor having 8-inch diameter by 6-inch stroke water-cooled cylinders and plate valves, the latter designed for operating at 400 revolutions per minute, at which speed the capacity is 140 cubic feet per minute. Discharge is directly into an air receiver having a volume of 10 cubic feet. The power end consists of a vertical four-cylinder gasoline engine having 4 $\frac{3}{4}$ -inch diameter by 5-inch stroke water-jacketed cylinders. This engine operates at 1000 revolutions per minute, and is fitted with a friction-clutch pulley to drive the compressor at its rated speed. The fuel consumption when operating at full speed is 25 pints of gasoline per hour. A

fan immediately back of the radiator cools the water so that little is necessary. Everything is mounted on a steel truck having metal canopy top and canvas ends and sides. The gasoline tank holds 20 gallons. Supply to the engine is by gravity.

Steel Ingot Production Falls Off.

The production of steel ingots, by months, from January to April, as reported to the American Iron and Steel Institute by 30 companies which made about 84.03 per cent of the steel ingot production in 1918, is as follows:

Months.	Gross tons			Total.
	Open hearth.	Bessemer.	All other.	
January, 1920.....	2,242,758*	714,657	10,687	2,968,102*
February	2,152,106	704,151	12,867	2,869,124
March	2,487,245*	795,164	16,640	3,299,049*
April	2,656,336	568,952	13,017	2,638,305

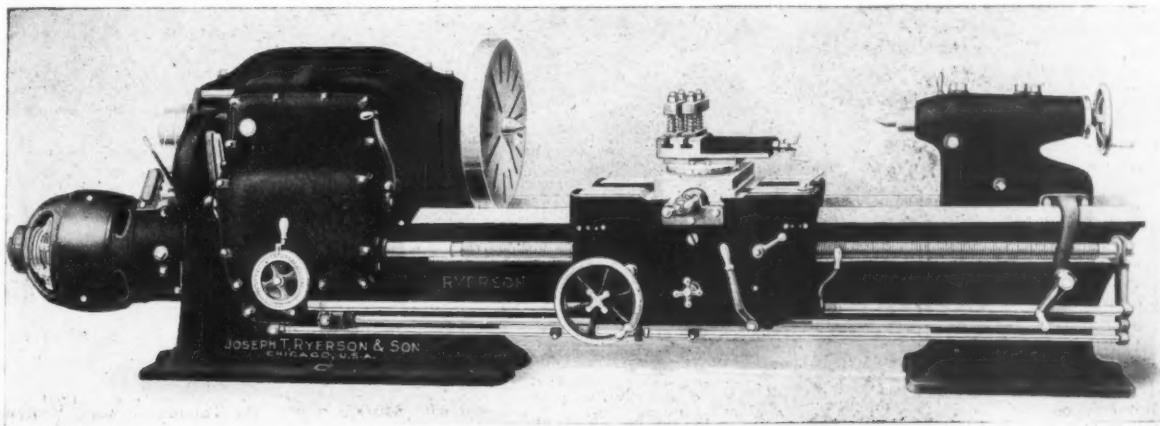
*Revised.

New High Power Engine Lathe.

A new high-power precision selective head engine lathe, known as the Ryerson-Conradson, is illustrated herewith. These lathes, it is stated by the manufacturers, Joseph T. Ryerson & Son, Chicago, include many special features in design, construction and operation. They meet the demand for an engine lathe which can be successfully employed for quantity production as well as for general machine-shop work. In them, according to the announcement, will be found the most advanced designs, high quality workmanship and finish, speed and ease of operation and accuracy of the finished product. They are made in five different sizes, 15, 18, 22, 27 and 33-inch swing, with any length of bed.

With hardly a change these lathes can be adapted to constant speed, single-pulley drive, with or without spindle reversing attachment, or direct reversing motor drive. In the latter arrangement the motor is bolted to the bed and the armature shaft directly connected with the main driving shaft, doing away with belts, tension idlers and chain drives. They can also be supplied with a constant-speed motor drive with spindle reversing attachment should a reversing motor not be desired. They have controls centralized at the apron. The twelve spindle speeds are changed by means of two levers on the headstock, which is cast integral with the bed. The spindle is a .60 carbon alloy steel forging of exceptionally large diameter, reducing all vibration to a minimum, increasing the bearing surface considerably and providing for a very large hole through the spindle.

Other special features are splash oiling system, all gears running in a bath of oil; herringbone gear drive to spindle; exceptional speed range (12 speeds, 28 feeds); all gears permanently in mesh; ways have large bearing surface and are of new design; special design of apron-feed mechanism; weight commensurate with liberal size of parts. A number of extra attachments can be supplied.



HIGH-POWER PRECISION SELECTIVE HEAD ENGINE LATHE FOR DIRECT MOTOR DRIVE.

Construction Department

EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

Airplane Plants, Stations, Etc.

Tex., San Antonio — Hangar. — War Dept., Constructing Quartermaster's Office, 307 Calcasieu Bldg.; construct 125x270-ft. steel frame hangar at Brooks Field; bids until June 1. (Lately noted bids Apr. 15.)

W. Va., Ellenboro—Aviation.—Zenith Aviation Co., Lambert, W. Va., inceptd.; capital \$50,000; H. L. Lambert, W. H. G. Smith; both Ellenboro; R. E. L. Frymier, Harrisville, W. Va.; purchased 7 airplanes.

Bridges, Culverts and Viaducts.

Ala., Arlton.—W. S. Keller, State Highway Eng., Bell Bldg., Montgomery, Ala.; construct reinforced concrete bridge and approaches over Pea Creek in Dale County; bids until June 7; changed date from May 10. (See Machinery Wanted—Bridge Construction.)

Ala., Huntsville.—Madison County Board of Revenue; erect 125-ft. span bridge over Flint River.

Ala., Elba.—W. S. Keller, State Highway Eng., Bell Bldg., Montgomery, Ala.; erect reinforced concrete bridge and approaches over Big Creek in Coffee County; 67,000 lbs. reinforcing steel; 3000 cu. yds. sand-clay surfacing; bids until June 7. (See Machinery Wanted—Bridge Construction.)

Fla., Nunez Ferry.—Hiram Sage, Penscola, Fla.; construct 650-ft. bridge over Perdido River; \$25,000.

Fla., Sanford.—Seminole County Comms., Sanford, and Lake County Comms., Tavares, Fla.; construct 226-ft. wooden bridge across Wekiya River; bids until May 12; Fred T. Williams, Engr., Sanford, Fla. (See Machinery Wanted—Bridge Construction.)

Fla., St. Augustine.—St. Johns County Commissioners, Obe P. Goode, Clerk; construct 58 reinforced concrete bridges, including Matanzas and North River bridges; 111.1 ml. road; bids until May 11; changed date from Apr. 20; Goold T. Butler, Engr. (See Machinery Wanted—Bridge Construction.)

Ga., Danielsville.—Madison County Comms., Roads and Revenues, Geo. O. Griffith, Commissioner; erect 4 bridges on Danielsville-Athens Rd.; 60-ft. steel span, 224 lin. ft. reinforced concrete approaches; 5 23-ft. concrete girder spans; 8 16-ft. concrete slab spans; bids opened; R. T. Goodwyn, Jr., Div. Engr., Athens, Ga.

Md., Detour. — Carroll County Comms., Westminster, Md., and Frederick County Commissioners, Frederick, Md.; erect 200x16-ft. bridge; \$16,562; Luten Bridge Co., Contr., York, Pa. (Lately noted inviting bids.)

Miss., Meridian.—City, Mayor Dabney; construct concrete bridges; voted \$60,000 bonds. (Lately noted to vote.)

N. C., Lexington.—Davidson County Commissioners, Lexington, and Rowan County Comms., Salisbury, N. C.; erect double-track concrete bridge over Yadkin River; \$65,000; State and Federal aid.

Okl., Freedom—Woods County Comms., Alva, Okla., and Woodward County Comms., Woodward, Okla.; erect bridge across Cimmaron River between Woods and Woodward counties; 48 32-ft. reinforced concrete girders; \$140,000; invite new bids; rejected previous bids; R. E. Terrell, Engr., State Capitol Bldg., Oklahoma City. (See Machinery Wanted—Bridge Construction.)

S. C., Bennettsville.—Marlboro County Highway Comms., J. C. Covington, Chrmn.; construct bridges and roads; vote on \$150,000 bonds.

Tex., Groesbeck.—Limestone County Commissioners, J. E. Bradley, Judge; construct bridges and roads in Groesbeck, Thornton and Mexia Dist.; bids until May 10; Fred P. Holt, Engr. (See Machinery Wanted—Bridge Construction.)

Tex., Hitchcock.—Galveston County Comms., Galveston, Tex.; construct Perthuis bridges; \$2,014.35; R. S. McGowan, Contr.

Tex., San Antonio.—City Comsn.; construct bridges; \$300,000 available; Bartlett & Ranney, Engrs.

W. Va., Wheeling.—Ohio County Comms.; awarded bridge contracts: Vincent Vercellotti, \$2042, 3 reinforced concrete bridges in Richland Dist.; Ridgely & Springer, \$4050, 4 reinforced concrete bridges in Triadelphia and Liberty Dist.

Canning and Packing Plants.

Fla., Lakeland.—Dorsett & Pickard; erect packing plant.

Fla., Lakeland. — Citrus Exchange; erect \$40,000 building.

Fla., Lakeland.—Dr. Phillips, Orlando, Fla.; erect packing-house.

Ga., Macon. — Empire State Canning Co. inceptd.; capital \$25,000; W. E. Small.

Ky., Utica.—Pocket Packing Co., Evansville, Ind.; establish tomato cannery; N. C. Howard, Mgr., Utica.

La., New Orleans.—Langhoff Bros. Co., 330 St. Joseph St.; increased capital from \$50,000 to \$200,000; contemplates doubling facilities; export and import honey.

Clayworking Plants.

Md., Baltimore.—Insulators.—Locke Insulator Co., Victor, N. Y.; build \$500,000 plant; mfr. pin-type insulators, bushings and accessories for high-voltage transmission lines; first buildings of concrete, brick and steel; 3 structures—340x141, 171.10x109.1 and 391x141 ft.; 15-

acre site on waterfront; construct 24 kilns; J. Henry Miller, Inc., Contr. for buildings, Eutaw and Franklin Sts., Baltimore. (Lately noted to build.)

S. C., Pendleton.—Bricks.—Pendleton Brick Co. inceptd.; capital \$30,000; Jno. A. Hudgens, Prest.-Treas.; C. H. Williams, Secy.

Tex., Athens.—Tiles.—Wilburn Tile Co. incorporated; capital \$5000; W. B. Fraser, J. H. Payne, J. J. Ryan.

W. Va., Chester.—Porcelain.—Davidson Porcelain Co., East Liverpool, O.; erect 3-kiln plant, 40,000 sq. ft.; brick; \$40,000; mch. ordered; mfr. electric porcelain; D. F. Nellis & Sons, Contrs., East Liverpool, O. (Supersedes recent item.)

Coal Mines and Coke Ovens.

Ky., Bell County.—Wagner Coal Co. inceptd.; C. A. Wagner, Bailey, W. Va.

Ky., Middlesboro.—Riverside Coal Mining Co.; increased capital from \$50,000 to \$100,000.

Ky., Middlesboro.—Home Coal Co.; increased capital from \$3000 to \$15,000.

Ky., Williamsburg.—High Splint Coal Co.; increased capital from \$400,000 to \$600,000.

Md., Cumberland.—Whyte Coal & Coke Co., Uniontown, Pa.; purchased 750 acres coal land on Indian Creek.

Md., Westernport.—A. B. Crichton Coal Co., Johnstown, Pa.; purchased Chaffee Coal Co. holdings; 2000 acres in Upper Potomac field, 500 population mining town and 3 ml. railway; 14 ml. south of Westernport; modernize mine to daily capacity 1500 tons coal.

Okla., Halleyville. — Caledonian Coal Co. inceptd.; capital \$50,000; T. C. Straw, Herbert Phillippi, Butler Brewen.

Va., Dunganon.—J. S. T. Coal Corp. chartered; capital \$25,000; Leis C. McNeer, Prest.; E. E. Thacker, Secy.

Va., Lynchburg.—Banner Fork Coal Corp.; increased capital from \$1,000,000 to \$1,200,000.

Va., Norfolk.—Rolsan Coal Corp. chartered; capital \$50,000; Robert T. Haslor, Prest.; S. L. Darden, Secy.

W. Va., Barrackville.—Penn-Mary Coal Co., Elkins, W. Va.; purchased Jamison mines Nos. 7 and 10; open new shaft; build mining town.

W. Va., Charleston.—Elkannaw Development Co. inceptd.; capital \$10,000; C. A. Moales, R. E. Woodall, R. H. Walker.

W. Va., Clarksburg.—R. S. Coal Co. inceptd.; capital \$25,000; Clarence B. Sperry, Willa Ora Bowers; both Clarksburg; G. R. Rogers, Mt. Clare, W. Va.

W. Va., Charleston.—Manhasset Coal Co. inceptd.; capital \$100,000; Geo. H. Pendleton, Arthur B. Hodges, Morgan C. Milne.

W. Va., Charleston. — Nay Aug Smokeless Fuel Co. inceptd.; capital \$150,000; J. W. Thayer, T. C. Benry.

W. Va., Charleston. — Shrewsbury Coal Co. inceptd.; capital \$25,000; C. E. Geottmen, Hal C. Nease, C. J. Van Fleet.

W. Va., Charleston. — Nay Aug Coal Co. inceptd.; capital \$150,000; J. A. Thayer, A. S. Guthrie, T. C. Beury.

W. Va., Charleston.—Kettle Run Coal Co. inceptd.; capital \$150,000; J. A. Thayer, A. S. Guthrie, T. C. Beury.

W. Va., Charleston.—Old Colony Smokeless Coal Co. inceptd.; capital \$100,000; J. W. Thayer, T. C. Benry.

W. Va., Fairmont.—Kane Coal Co. inceptd.; capital \$50,000; Earl S. Fox, Fairmont; Samuel Hale, Charles W. Teter; both Philippi, W. Va.

W. Va., Gilbert.—Harry's Branch Coal & Coke Co. inceptd.; capital \$50,000; C. H. Easley, W. C. Slusher, J. A. Hare; all Bluefield, W. Va.

W. Va., Huntington. — Overseas Coal Co., First National Bank Bldg., inceptd.; capital \$50,000; J. W. Tague, H. K. Marcum; mine coal in Cabell, Lincoln, Logan and Boone counties.

W. Va., Huntington. — Muscote Fuel Co. inceptd.; capital \$10,000; B. L. Douglas.

W. Va., Huntington. — Westkole Fuel Co., First National Bank Bldg., inceptd.; capital \$50,000; F. P. Kuhn, John S. Marcum, C. P. Marshall; mine coal in Cabell, Lincoln, Logan and Boone counties.

W. Va., Huntington. — Huntington By-Products Coal Co. inceptd.; capital \$100,000; R. Hamilton, B. Hamilton, B. L. Briddle.

W. Va., Kingwood.—Lick Run Coal & Coke Co. inceptd.; capital \$75,000; F. R. Hansell, Geo. H. B. Martin; both Philadelphia, Pa.

W. Va., Meadowbrook.—Meadowbrook Coal Co. inceptd.; capital \$50,000; Everhart Bieren, Joseph M. Wood, William R. Chapman.

W. Va., Nuttallburg.—Stover Coal Co. organized; Holly Stover, Prest., Fisher Bldg., Chicago, Ill.; develop coal lands; daily output 1000 tons when additional improvements are completed. (Lately noted inceptd., acquired coal mine, install equipment, build miners' houses; \$700,000 to \$800,000.)

W. Va., Queen Shoals. — Rex Colliery Co. inceptd.; capital \$150,000; J. B. Ramage, Queen Shoals; W. T. Lively, Charleston, W. Va.; C. H. Hoyt, Toledo, O.

Concrete and Cement Plants.

Ark., Arkadelphia.—Concrete Bricks.—Wright Brick Co. organized; N. V. Wright, Prest.; establish plant; install mchy.; purchased; daily capacity 20,000 bricks.

W. Va., Warwood.—Concrete Bricks, etc.—Concrete Brick Products Co. organized; Theodore Smith, Prest., 622 Wheeling Bank & Trust Bldg., Wheeling, W. Va.; George Schramm, Secy., Bridgeport, W. Va.; purchased 2-acre tract; erect plant to mfr. concrete brick, building stone, chimney blocks, lathing and fence posts.

Cotton Compresses and Gins.

Ala., Jackson.—Bolen Brothers; establish gin, light plant and sawmill.

Miss., Canton.—Farmers' Gin Co. inceptd.; capital \$20,000; T. H. Sandidge, C. B. Noble.

Okla., Middleburg.—Middleburg Gin & Grain Co. inceptd.; capital \$20,000; W. C. Miller, Prest.; J. H. Pilgrim, Treas. (Lately noted inceptd.)

S. C., Bishopville.—Bishopville Ginning & Trading Co. inceptd.; capital \$25,000; D. C. Stuckey, Prest.; R. W. McCutchen, Secy.—Treas.; V. M. Durant, Bus. Mgr.

S. C., Lynchburg.—Pleasant Grove Gin Co. inceptd.; capital \$10,000; A. J. Coleman, Prest.; J. F. Yarborough, Secy.—Treas.

S. C., Bishopville.—Co-Operative Gin Co. inceptd.; capital \$10,000; M. J. Sanders, Prest.; M. J. Frederick, Secy.; Ely Johnson, Treas.

Tex., Cibola.—Cibola Farmers' Gin Co. inceptd.; capital \$30,000; E. J. Stapper, Fredo Warner, Jr.

Tex., Galveston.—Galveston Wharf Co.; install 6 high density cotton compresses, mono-rail and overhead conveyors; serve every pier

on wharf front; 24-hr. capacity of presses, 1500 bales; initial investment, \$500,000; contract for placing and operating let to J. H. W. Steele, Galveston, and A. J. Dossett, Waco, Tex.

Tex., Oplin.—Oplin Gin Co. inceptd.; capital \$12,000; T. A. Irvin, Ben Allen, J. M. Glover.

Tex., Robstown.—Petronilla Cotton Gin Co. inceptd.; capital \$20,000; L. B. McCain, W. S. Stephenson, W. B. McBurnett.

Tex., Schertz.—Lone Star Farmers' Gin Co. inceptd.; capital \$25,000; Adolph Weyel, Wm. Schulz, Rudolph Rudeff.

Tex., Temple.—Central Compress Co., Henry P. Smith, Gen. Mgr., Waco, Tex.; erect 1500 squares sheds on cotton wharf; corrugated iron structures; \$25,000. Lately noted rebuild burned plant. (See Machinery Wanted—Wire Cloth.)

Cottonseed-Oil Mills.

Ga., Augusta.—Planters' Cotton Oil Mill; erect mealroom; \$9000; T. O. Brown & Son, Contrs.

Drainage Systems.

Ark., Pine Bluff.—Ziba Bennett Plantation Co.; drain Glen Lake; 30,000 yds. excavation; \$15,000; McWilliams Co., Contr., Memphis, Tenn.; Parkes Engineering Co., Engr., Pine Bluff.

Fla., Tavares.—Clermont Drainage Dist., Lake County Commrs., L. V. Simpson, Chrmn.; construct drainage system; 655,000 cu. yds. excavation; lock and dam; 9 drainage wells; bids until June 7; Fred T. Williams, Engr., Sanford, Fla. (See Machinery Wanted—Drainage System.)

La., Cameron Parish.—J. L. Dumas, Austin, Tex.; purchased 15,000 acres marsh land; will become part of reclamation project covering 45,000 acres.

La., Kaplan.—Vermillion County, A. M. Smith, Secy., Drainage Dist.; construct drainage system; \$55,000 bonds.

La., Lake Providence.—Bunches Bend Drainage Dist. Commrs.; construct 3 3/10 mi. drainage canals; 362,500 cu. yds.; bids until May 18; plans with Holland-Delta Co., 1315 Bank of Commerce Bldg., Memphis, Tenn. (See Machinery Wanted—Drainage System.)

La., Welsh.—Welsh Drainage Dist. No. 1, Jefferson Davis Parish, John T. Hood, Secy.; construct 2 mi. canals, with laterals; \$125,000; open bids May 31; Ardis Colbert, Engr., Jennings, La. Lately noted voted \$130,000 bonds. (See Machinery Wanted—Drainage System.)

N. C., Winter Park.—New Hanover County Drainage Dist. No. 2, E. H. Freeman, Chrmn. Commrs., Wilmington, N. C.; construct 3 mi. drainage ditches; 13,000 cu. yds. excavation; 2 wooden bridges; bids until May 18; J. L. Becton, Engr., Wilmington, N. C. (See Machinery Wanted—Drainage Ditches.)

Electric Plants.

Ala., Jackson.—Bolen Brothers; establish light plant, gin and sawmill.

Ark., Stephens.—City; install electric-light and sewer systems. Address The Mayor.

Ark., Sulphur Springs.—Harry Hanf; install electric, sewer and water systems; improve grounds; erect 2 residences.

Fla., Apalachicola.—City; construct light plant. Address The Mayor.

Fla., Kissimmee.—Southern Utilities Co.; increase capital \$2,500,000.

Ga., Elberton.—Elberton Oil Mills, J. T. Dennis, Jr., Mgr.; contemplates construction power plant.

Ga., Pearson.—City; install lighting and

water systems; voted \$30,000 bonds. Address The Mayor.

Ky., East Bernstadt.—East Bernstadt Light Co. inceptd.; capital \$5000; Chas. Davidson, C. A. Casteel, W. J. Chestnut.

La., Lafayette.—City; improve and extend electric light and water systems.

Miss., Edwards.—Town, H. A. Cannada, Clk.; construct electric-light and power plant; voted \$7500 bonds.

Mo., Marshall.—Board of Managers, Missouri Colony for Feeble-Minded and Epileptic; construct power plant addition; install boiler, heating and plumbing; bids until May 14; J. H. Felt & Co., Archts., Kansas City Mo. (See Machinery Wanted—Boiler.)

N. C., Henderson.—American Agricultural Chemical Co., 2 Rector St., New York; rebuild burned fertilizer plant; loss \$500,000.

N. C., Kinston.—City, Joe Dawson, Mayor; install power plant; 1500 K. W. turbo-generator unit; surface condenser, with dry vacuum and hot-well pumps, etc.; bids until May 18; W. C. Olsen, Consult Engr., Sumter, S. C. Bids postponed from May 11. Further facts lately noted. (See Machinery Wanted—Electric Plant.)

N. C., Newland.—Newland Light & Power Co. inceptd.; capital \$25,000; E. C. Guy, Mgr.; erect \$10,000 plant; 12-ft. dam, 92-ft. head of water; total cost \$15,000; 1100-ft. transmission line; develop 110 H. P. (See Machinery Wanted—Pipe.)

N. C., Youngsville.—City, J. R. Pearce, Mayor; construct electric-light system; \$30,000 bonds; power from Carolina Light & Power Co.; bids until May 10; contractor desired. (See Machinery Wanted—Wire, etc.)

Okla., Tulsa.—Middle West Utilities Co., Oliver E. McCormick, Treas., 72 W. Adams St., Chicago, Ill.; construct generating station; all contracts let.

S. C., Columbia.—City; extend and improve street-lighting system; \$30,000; W. H. Harth, Electrician.

Tenn., Nashville.—Mohrllite Co. of America, W. M. Dixon, Mgr., Urbana, O.; construct \$300,000 plant.

Tex., Pharr.—Pharr Ice & Power Co.; contemplates extending lines to adjoining towns; purchased Pharr Mill & Elevator Co.'s electric light and power plant.

Fertilizer Factories.

Fla., Palatka.—McGuire Fertilizer Co., Morriston, Fla.; erect \$100,000 to \$200,000 fertilizer mixing plant.

Flour, Feed and Meal Mills.

Ga., Valdosta.—Valdosta Mill & Elevator Co.; install cornmeal equipment to replace present mchy.; increase plant capacity from 400 to 1200 bushels.

Ky., Paducah.—Heffer Bros., Lowes, Ky.; erect \$40,000 flour mill; cornmeal, flour and mixed feeds.

Miss., Jackson.—Royal Feed & Milling Co., Case & McGeorge, Mgrs., New Orleans, La., and Memphis, Tenn.; rebuild burned mill.

Mo., St. Louis.—D. R. Francis, 214 N. 4th St.; erect 9-story and basement 100x32-ft. fire-proof mfg. building; brick; reinforced concrete; P. J. Bradshaw, Archt., International Life Bldg.; W. J. Knight Engineering Co., Engr., Wainwright Bldg.

S. C., Spartanburg.—Spartanburg Roller Mills; convert flour mill into feed milling plant.

Tex., Houston.—Waldman-Ross Grain Co.; increase capital from \$150,000 to \$200,000.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Va., Glade Springs.—Glade Spring Milling Co. inctpd.; W. P. Buchanan, Prest.; W. G. Pendleton, Secy.

Foundry and Machine Plants.

Ala., Birmingham—Freight Cars.—Tennessee Coal, Iron & R. R. Co.; build freight car shops; reported to cost \$2,500,000; Horace M. Lane, 2320 Dime Bank Bldg., Detroit, Mich., preparing plans; Geo. G. Crawford, Prest., wires Manufacturers Record: Nothing to state on car plant at this time.

Ark., Wynne—Blowpipe.—Wynne Blowpipe Mfg. Co. inctpd.; capital \$12,000; J. B. Brown, J. F. Lay, D. H. Hamilton.

Fla., Jacksonville—Iron Products.—Duval Foundries inctpd.; capital \$10,000; A. T. Hill, Prest.; C. J. Eppert, V.-P.; S. W. Hornbrook, Secy.-Treas.

Ga., Columbus—Peanut Pickers.—Southern Implement Mfg. Co. inctpd.; capital \$70,000; Walter T. Spough, Prest.-Treas.; John L. Harrington, V.-P.; J. F. Spough, Secy.; establish plant to mfr. peanut-picking machines; output this season 100 machines.

Ky., Hopkinsville—Farm Implements.—Forbes Corp. chartered; capital \$400,000; M. C., J. M. and W. H. Forbes; mfr. farm implements, wagons, etc.

Ky., Louisville—Corn Shellers, etc.—Red Chief Mfg. Co., 702 E. Main St., organized; Alexander T. Farnsley, Prest.; A. Pfeiffer, V.-P.; J. P. Van Winkle, Secy.; mfr. corn shellers and grinding mills. (Lately noted inctpd., capital \$50,000.)

Ky., Louisville—Pipe, etc.—P. Bannon Pipe Co.; erect \$70,000 plant; hollow tile construction; 125x160 ft. floor space.

Ky., Paducah—Knitting-mill Machinery.—Southern Textile & Machinery Co., W. G. Paxton, Mgr., 433 S. 3d St.; acquired 672-ft. front site; erect first unit of steel and glass buildings, including foundry, main boiler, drop forging and die-casting plants and accessory units.

Mo., Kansas City—Hay Press.—Admiral Hay Press Co.; enlarge plant; purchased additional building; remodel.

Mo., St. Joseph—Structural Steel.—St. Joseph Structural Steel Co., T. W. Dodd, Prest., 4th and Franklin Sts.; erect steel fabricating shop, consisting of 100x180-ft. and 40x100-ft. buildings; fireproof; purchased material; construction by owner. (Supersedes recent item.)

Mo., St. Louis—Electrical Machinery.—Valley Electric Co., 794 Arcade Bldg., organized; capital \$325,000; S. A. Whitten, Prest.; E. C. Ballman, V.-P.; George M. Elliott, Secy.; Herbert Elder, Treas.; acquired plant; erect additional seven 1-story 30x200-ft. brick buildings; three 2-story 40x400-ft. concrete buildings; fireproof construction; install lathes, millers, stampers, presses, drills, etc.; Henry Dilschneider, Contr., 5408 Easton Ave.; Nolte & Nauman, Archts., Fullerton Bldg.; mfr. electric motors, motor generators, battery chargers, etc. (Supersedes recent item.)

N. C., Charlotte—Roller Covering.—Piedmont Sundries Co.; erect machine and roller-covering plant; 2-story brick buildings; \$15,000; Thies-Smith Realty Co., Contr.

N. C., Greensboro—Plumbers' Supplies.—All-right Mfg. Co.; erect 3-story 60x200-ft. building; reinforced concrete and builders' tile construction; \$100,000; install mchy.

N. C., Statesville—Foundry Products.—C. H. Turner Foundry Co.; erect 40x50-ft. foundry; \$10,000. (See Machinery Wanted—Pulley Moulder.)

N. C., West Jefferson—Mill Machinery.—Blackburn Mill Mfg. Co. inctpd.; capital \$100,000; B. E. Reeves, Laurel Springs, N. C.; B. C. Waddell, Grassy Creek, N. C.

Okla., Tulsa—Tanks.—Deck Tank Co. inctpd.; capital \$175,000; J. F. and Geo. W. Deck, J. K. Adair.

S. C., Charleston—Gas Engines, etc.—Gas Engine & Electric Co., A. D. Wall, Prest.; increased capital from \$50,000 to \$100,000.

S. C., Florence—Repairs.—Bridges Machine Co. organized; T. H. Foss, Prest.; W. H. Hudgin, V.-P.; Grace N. Latham, Secy.-Treas. (Lately noted inctpd., capital \$10,000.)

Va., Richmond—Locomotives.—American Locomotive Co.; remodel mfg. plant and warehouse; \$10,000.

W. Va., Fairmont—Safety Devices.—Colburn Safety Device Co. organized; Geo. T. Watson, Prest.; W. D. Stockley, V.-P.; J. D. Evans, Secy.; W. G. Colborn, Treas.; holding company for patents; later organize company to mfr. (Lately noted inctpd., capital \$100,000.)

W. Va., Huntington—Tools.—Fulton Tool Works; erect 2 structural steel buildings; \$25,000 and \$10,000.

W. Va., Mannington—Boilers, etc.—Mannington Boiler Works, T. M. Haugh; erect additional plant; install mchy.; mfr. boilers, tanks, structural steel, etc.

Gas and Oil Enterprises.

Ark., Camden.—Onachita Oil Co. organized; capital \$50,000; J. C. Ursey, Prest.; J. W. Moore, Secy.-Treas.

Ky., Louisville—Railroaders' Oil Co., 204 Republic Bldg., organized; capital \$2,000,000; T. J. Heaton, Prest.; J. J. O'Malley, Secy.-Treas.; both Milwaukee, Wis.; G. B. Crowe, Field Mgr., Louisville. (See Machinery Wanted—Well-drilling Equipment.)

La., Shreveport—Refinery.—Great Southern Producing & Refining Co., W. J. Hungate, Secy.-Treas. and Mgr., 1007 Hume-Mansur Bldg., Indianapolis, Ind.; capital \$2,000,000; erect 12,000-bbl. refinery on Red River; plant to include: 130x35-ft. laboratory and engineer building; 2-story 75x35-ft. office, brick; 75x35-ft. lockers and shower bathhouse; 200x40-ft. machine and repair shop; 117x30-ft. stillhouse; 128x48-ft. boiler-house; 275x60-ft. residuum refining plant; 8-A condensers, pipe from condensers to tallhouse; 50x25-ft. electric plant, four 250 H. P. units, using exhaust steam from pre-heaters; fuel-oil tank; 40x20-ft. tallhouse; chemical tanks; fire extinguisher system; 60x30-ft. pumphouse; 200x40-ft. gasoline canning plant; 260x40-ft. lubricating oil canning plant; 260x40-ft. can factory; 400x40-ft. asphalt storage and shipping; 400x40-ft. coopeage; 250x40-ft. lubricating storage-house; 170-ft. electric tower; 100x40-ft. crude-oil tanks; 14x10x3-ft. embankments, in cross section, 60 ft. from tanks; 44x8-ft. storage tanks; 25x20-ft. lubricating oil storage tanks; contracts awarded; J. E. A. Moore, Constr. Engr., 702-1900 Euclid Bldg., Cleveland, O. (Supersedes recent item.)

Mo., Springfield—Reclamation Plant.—V. R. Harlow, San Francisco, Cal.; establish oil-reclamation plant.

Okla., Devol.—Devol Oil & Gas Co. inctpd.; capital \$35,000; W. T. Huff, J. M. Patterson, J. E. Laney.

Okla., Oklahoma City.—Lac Qui Parle Oil Corp. inctpd.; capital \$100,000; R. H. Pierce, A. L. Peter, M. Dusbabek.

Okla., Okmulgee.—Chief Drilling Co. inctpd.; capital \$25,000; A. B. Crepps, O. K. Detrick, R. W. Griffith.

Tex., Brenham—Gas Plant.—Brenham Gas Plant, Jno. T. Callahan, Gen. Mgr.; purchased gas plant; extend mains; drill for natural gas.

Tex., San Antonio—Refinery.—Stokes Oil & Refining Co., J. M. Stokes, 403 Prudential Bldg.; drill 10 additional wells. Lately noted inctpd., capital \$75,000. (See Machinery Wanted—Piping.)

Tex., Fort Worth.—Weekley Petroleum Co. inctpd.; capital \$500,000; B. F. Weekley, R. H. Hunter, F. K. Johnson.

Tex., Sour Lake.—Cromwell Oil Co. inctpd.; capital \$50,000; T. A. Cromwell, R. R. Stevens, E. M. Masterman.

Tex., Wichita Falls.—Black Eagle Oil Corp. chartered; \$10,000; M. M. Cooke, L. H. Roberts, J. H. Gardner.

Va., Danville—Gas Plant.—City; install \$30,000 gas-plant addition; erect building; install equipment to mfr. water gas; contract let.

W. Va., Blacksville.—Thirty-two Oil & Gas Co. inctpd.; capital \$50,000; J. J. Miller, S. M. Stewart, J. W. Scott; E. A. Park, Engr. (See Machinery Wanted—Piping; Tubing.)

W. Va., Morgantown—Gas Plant.—Mississippi Wire Glass Co.; install \$100,000 coal-gas producing plant; gas production capacity equivalent to 1,500,000 cu. ft. natural gas.

Hydro-Electric Plants.

Ala., River View.—Riverdale Cotton Mills; build concrete dam in Chattahoochee River; 1000 ft. long, 12 or 14 ft. high; replace wooden structure; \$100,000; Hardaway Construction Co., Contr., Columbus, Ga.; L. W. Roberts & Co., Atlanta, Ga.

Ice and Cold-Storage Plants.

Ala., Catherine.—Purity Creamery Co., Selma, Ala.; erect cooling plant and receiving depot; monthly capacity 18,000 gala.

Miss., McComb City.—X. A. Kramer, Magnolia, Miss.; acquired established plant; enlarge and increase capacity.

Mo., St. Louis.—Polar Wave Ice & Fuel Co., 3826 Olive St.; erect 1 story 110x115 ft. building; reinforced concrete construction; H. G. Clymer, Archt., Walnwright Bldg.; H. Dilschneider, Gen. Contr., 5408 Easton St.

W. Va., Keyser.—Potomac Milling & Ice Co.; enlarge ice plant; increase capacity \$25,000.

Iron and Steel Plants.

Md., Baltimore—Steel Rolling Mill.—National Steel Rolling Co., Philip C. Walsh, 3d, Mgr., 295 Passaic St., Newark, N. J.; erect 140x70-ft. \$30,000 building; steel mill construction, sheet-iron sides; open bids May or June; will name Baltimore architect; install rolling-mill mchy. of special design, shears, machine tools, blacksmith equipment, electric motors, etc.; daily capacity 25 tons bar iron and steel. Lately noted to build \$100,000 plant. (See Machinery Wanted—Rolling Mill Equipment; Motors; Machine Tools; Blacksmith Tools.)

Land Developments.

Ark., Sulphur Springs.—Harry Hanf; improve grounds; install electric, sewer and water systems; erect 2 residences.

Ga., Augusta.—Frank H. and Thomas Barrett; develop 1500 acres on Lake Olmstead for residential section of 3000 homes.

N. C., New Holland.—North Carolina Farms Co.; reported as having \$2,000,000 available for development, including railway from New Holland, site of drainage pumping station.

S. C., Chester.—Baldwin Cotton Mills; improve mill village and sewage-disposal plant; Tucker & Laxton, Gen. Contrs.; Waldrop & Co., Plumbing Contrs., all Charlotte, N. C.

Tex., Dallas.—Holtex Farms inctpd.; capital \$70,000; W. F. and Pansy M. Cage, J. M. Dickey.

W. Va., Martinsburg.—Pioneer Orchard Co. inctpd.; capital \$130,000; E. C. Henshaw, Walter W. Trout, Dudley Harley.

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Lumber Manufacturing.

Ala., Jackson.—Bolen Bros.; establish sawmill, gin and light plant.

Ala., Mobile.—Harden Lumber Co. inctpd.; capital \$14,000; J. M. Walsh, George L. Kilmer, George S. Harden.

Ark., Arkansas City.—Arkansas-Mississippi Logging Co. organized; capital \$25,000.

Ark., Armstrong Springs.—Acme Box Co., Searcy, Ark.; install sawmill.

Ark., Fayetteville.—Thompson-Ross Lumber Co. inctpd.; capital \$75,000; W. G. Thompson, E. R. Ross, F. P. Earle.

Fla., Jacksonville.—St. Johns Red Cypress Co. inctpd.; capital \$1,000,000; C. D. Fish, Prest.; T. R. Sweat, V.-P.; W. A. Hamilton, Secy.-Treas.

Fla., Lakeland.—Lakeland Mfg. Co., G. W. Merahon, Propr.; erect 2-story brick building; fireproof; \$35,000. (Lately noted to rebuild burned plant.)

Fla., Merritt.—Widman & Easterly; install planing mill; contemplated.

Fla., St. Petersburg.—Maine Lumber & Supply Co. inctpd.; capital \$300,000; Alfred R. Clark, Prest.; Albyn A. Stebbins, V.-P., both St. Petersburg; Charles F. Cowdrey, Secy.-Treas., Fitchburg, Mass.

La., Alexandria.—F. C. Murphey Lumber Co. inctpd.; capital \$15,000; John Pennington, Prest.; Frank C. Murphey, Secy.-Treas.

La., Sulphur.—Powell Lumber Co.; rebuild burned sawmill; daily capacity 15,000 ft.

Md., Pasadena.—Liberty Sand & Gravel Co.; install sawmill; daily capacity 3000 ft. lumber. Mountain Lumber Co. inctpd.; capital \$100,000; Oscar O'Connell, John Kessinger; both White Sulphur Springs; J. A. Visquesney, Belington, W. Va.

Miss., Quentin.—Central Lumber Co., Brookhaven, Miss.; erect planing mill, drykilns, etc.; has \$30,000 capacity double-band and circular sawmill; mfrs. hardwoods and Southern pine.

N. C., Fayetteville.—Fayetteville Lumber Co. inctpd.; capital \$100,000; John R. Tolar, Jr., L. S. Adams, N. A. Sinclair.

S. C., Florence.—Wagoner Lumber Co. inctpd.; capital \$20,000; Charles B. Wagoner, H. M. Propst.

S. C., Florence.—Sylecau Mfg. Co., Rock Hill, S. C.; install 30,000-ft. daily capacity circular sawmill with boiler and engine. (See Machinery Wanted—Sawmill; Locomotive; Cars; Rails.)

Tenn., Johnson City.—W. S. Whiting Lumber Co.; rebuild burned plant.

Tex., Beaumont.—George W. Smyth Lumber Co.; erect planing mill.

Tex., Deweyville.—Peavy-Moore Lumber Co., Shreveport, La.; erect 9-in. band and resaw mill; daily capacity 80,000 ft.

Tex., Plano.—Plano Lumber Co.; increased capital from \$20,000 to \$40,000.

Tex., Port Arthur.—Palmer Lumber Co. organized; capital \$40,000; C. V. Palmer, G. E. Carter, P. H. LaGrone.

Tex., San Augustine.—Collwood Lumber Co., Lufkin, Tex.; erect hardwood mill.

Va., Laurel.—White Lumber Co.; rebuild burned saw and lath mill.

Va., Narrows.—B. T. Johnson, H. W. Hale, K. R. Shumate; purchased 5200 acres timber land; develop; build several sawmills.

W. Va., Huntington.—Huntington Tie & Lumber Co., Huntington Hotel Bldg. (lately noted inctpd., capital \$100,000), organized; L. B. Mullins, Prest., Box 1071; W. W. Jackson, V.-P. and Mgr.; Ham Adams, Secy.; E. M. Howard, Treas.; has mills at Huntington, Myra, W. Va.; Dunlow, W. Va. (See Ma-

chinery Wanted—Sawmill Supplies; Feed Mill Supplies.)

W. Va., White Sulphur Springs.—Peters Tenn., Nashville.—Spillers-Wright Lumber Co. inctpd.; capital \$50,000; J. W. Spillers, J. B. Wright, Thomas W. Pinson.

Metal-Working Plants.

La., Shreveport.—Tin Shop.—Phaneuf Tin Shop, A. O. Phaneuf, Propr.; erect 1-story brick plant.

Mo., Springfield.—Sheet Metal Stoves, etc.—Hayden Mfg. Co. inctpd.; capital \$200,000; B. J. Hayden, O. E. Saylor, H. J. Miller; mfrs. sheet metal stoves, stove pipes, hinges, locks, etc.

S. C., Anderson.—Roofing.—Divver Roofing Co.; erect 1-story 48x98-ft. building; cement-brick construction; steel sash and windows; concrete floor.

Tex., Dallas—Brass.—Dallas Brass Mfg. Co. inctpd.; capital \$30,000; J. Watt Davis, George Soutter, Jr., M. O. Booth.

Tex., Fort Worth.—Retinning and Plating.—Southwest and Southern Plating & Retinning Co., 415 Throckmorton St., organized; Thos. B. Van Tuyl, Prest.; Z. J. Eury, V.-P.; D. L. Cox, Secy.; W. L. Osborn, Treas. and Gen. Mgr.; establish plant. (Lately noted inctpd., capital \$6000.)

Mining.

Ky., Nicholasville.—Heyward Minerals Co. inctpd.; capital \$125,000; Thos. R. Heyward, Jr., Harry D. Smith, J. H. Marriott.

Ky., Louisville.—Wire Wheels.—Wire Wheel Repair Co. inctpd.; capital \$2000; Edward Cohn, E. V. Monsch, Arthur L. Ralidt.

Md., Baltimore.—Beds.—Simmons Co., Kenosha, Wis.; Chase St. and Guilford Ave., Baltimore; build 2-story 750x175-ft. factory; concrete, steel and brick; reported cost \$1,500,000. (Lately noted.)

Mo., St. Louis.—Philipsburg Mining Co., John P. Meyer, Prest., 821 Security Bldg.; increased capital from \$50,000 to \$750,000.

Mo., St. Louis.—Metal Doors.—Security Fire Door Co. organized; J. A. Schweig, Prest.; A. M. Freuns, Treas.; leased 2-story brick building; 10,000 sq. ft. floor space; mfrs. underwriters' labeled tin-clad fire doors for elevators, factories, etc.

Va., Henry.—Talc.—Blue Ridge Talc Co. incorporated; capital \$100,000; C. D. Bryant, Prest., Spring Garden, Va.; C. O. Kitson, Secy., Henry.

Miscellaneous Construction.

Md., Frederick.—Heating Plant.—Maryland State School for Deaf, Ignatius Bjorlee, Principal; install two 150 H. P. boilers; \$20,000; bids open; Chas. L. Reeder, Engr., Baltimore. (Lately noted to install heating plant.)

S. C., Columbia.—Heating Plant.—State; install Webster vacuum steam heating plant with automatic control in South Carolina State Capitol; \$34,500; Sam W. Cannon, State Electrician and Engr.

Tenn., Nashville.—Wharf, etc.—City Comsn.; construct municipal wharf and river terminals; \$30,000 available.

Tex., Dallas.—Levee.—City of Dallas and Dallas County Levee Improvement Dist. No. 10, 808½ Commerce St.; construct 9 mi. levee, with drainage and roadway structures; 8,000,000 yds. earthwork; \$5,000,000; E. N. Noyes, Dist. Engr.

Tex., Temple.—Swimming Pool.—Young Men's Christian Association; construct swimming pool; \$18,000.

W. Va., Morgantown.—Mausoleum.—Sanitary

Mausoleum Co., U. J. Smith, Mgr., Reading, Pa.; erect \$75,000 mausoleum in Oak Grove Cemetery; steel, granite, concrete and bronze construction.

Miscellaneous Enterprises.

Ga., Fitzgerald.—Potato Curing.—Union Cotton Oil Co., C. A. Newcomer, Mgr.; increase plant's capacity to 60,000 bu.

Ga., Summerville.—Laundry.—Summerville Cotton Mills; erect laundry.

Ky., Ashland.—Printing.—Tri-State Printing Co.; increased capital from \$5000 to \$10,000.

Ky., Louisville.—Construction.—General Construction Co.; increased capital from \$25,000 to \$150,000.

Ky., Louisville.—Stockyards.—Bourbon Stockyards; rebuild burned sheds, cornercribs and barns; loss \$200,000.

Md., Baltimore.—Tools.—West Indies Trading Corp., 332 Equitable Bldg.; inctpd.; L. Percy and M. MacKinnon Mills, Walter W. Parker.

Md., Chestertown.—Fire Equipment.—Town, Charles N. Satterfield, Commr.; install additional fire equipment; pave streets, etc.; vote on \$10,000 bonds.

Miss., Canton.—Laundry.—Canton Steam Laundry inctpd.; capital \$20,000; A. T. Graham, L. K. Levy.

Miss., Jackson.—Potato Curing.—Farmers' Potato Curing Corp., Fred Lynch, Jr., Mgr.; erect 40x100-ft. mill-construction building; U. S. Dept. of Markets, Archt. (Lately noted organized.)

Miss., Charleston.—Printing.—Charleston Publishing Co. inctpd.; capital \$30,000; W. S. Merriweather, Bramwell Davis.

Miss., Jackson.—Laundry.—Star Steam Laundry, H. B. Jenkins, Propr.; enlarge laundry; install additional mchy.; purchased.

Miss., Meridian.—Incinerator.—City; Mayor Dabney; construct incinerator plant; voted \$15,000 bonds. (Lately noted to vote.)

Mo., Springfield.—Construction.—Highway Construction Co. inctpd.; capital \$35,000; Harry G. Horton, Charles McGregor, Dwight R. Newton.

N. C., Mebane.—Publishing.—Enterprise inctpd.; capital \$25,000; W. B. Miller, J. S. Vincent, T. C. Carter.

Okla., Oklahoma City.—Mineral Water.—Electrozone Water Co., 28 Terminal Arcade, organized; J. E. Offutt, Prest.; E. Whittington, V.-P.; J. C. Luitweller, Secy.-Treas.; Geo. H. Coe, Mgr.; erect 40x80-ft. building; ordinary construction; bids open July 15; install \$17,000 machinery. (Lately noted inctpd., capital \$30,000.)

S. C., Columbia.—Heating Plant.—State; install heating plant in Capitol building; \$34,480; W. B. Guimatin Co., Contr.

S. C., Ware Shoals.—Dairy.—Ware Shoals Mfg. Co.; enlarge dairy; Fiske-Carter Construction Co., Contr., Greenville, S. C.

Tex., Longview.—Laundry.—Longview Steam Laundry; rebuild burned plant; loss \$15,000.

Va., Norfolk.—Electric-light Systems.—Farm Light Corp. of Virginia-Carolina inctpd.; capital \$25,000; J. C. Gurley, Prest.; T. A. Pope, Secy.

Miscellaneous Factories.

Ark., Hope.—Foldometer Co. inctpd.; capital \$100,000; Jesse N. Riley, T. J. Tullis, A. T. Betts.

Ark., Little Rock.—Sulphuric Acid.—Little Rock-Picron Industrial Co. organized by Everly M. Davis Chemical Corp., 450 Lexington Ave., New York, in association with H. C. Couch, Prest. of Arkansas Light & Power Co. and associates; purchased (from United

States) sulphuric-acid plant erected and operated during war by Davis company; plant consists of 2 chamber sets, with monthly capacity 9000 tons 60 per cent sulphuric acid; has equipment to concentrate that output to 66 per cent sulphuric; arranged for 90 tank cars to distribute product. (Supersedes recent item.)

Fla., Jacksonville—Moss Products.—Florida Moss Products Co. inceptd.; capital \$100,000; A. T. Hill, Prest.; H. C. Fueller, Secy.

Fla., New Port Richey—Palm Furniture, etc.—Palm Products Co., Rush Bros.; establish plant to mfr. decorative furniture from native palms, artificial palm leaves for trade, brushes from palmetto roots; install steaming and bending mchy., looms, motors, woodworking mchy. (See Machinery Wanted—Looms; Steaming Machinery; Bending Machinery; Motors; Woodworking Machinery; Cutting Machinery.)

Fla., Palatka—Bakery.—Palatka Baking Co. inceptd.; capital \$30,000; L. W. Warren, Prest.; H. J. Goldsmith, Secy.

Fla., Tampa—Cigars.—Demmi Cigar Co., Pasquales Cacciatore, Mgr.; erect 3-story 150x36-ft. factory building; brick; \$18,000; install mchy.; daily output 30,000 cigars; M. Leo Elliott, Archt.; J. S. Cardone, Contr. (Demmi Bros. lately noted to build.)

Fla., West Tampa—Cigars.—Henriquez Cigar Co. inceptd.; capital \$50,000; T. D. Fisher, Prest.; E. Henriquez, Treas.-Gen. Mgr.

Ga., Albany—Peanut Hulls.—Newsome Grain & Feed Co., Pittsburgh, Pa., Petersburg and Suffolk, Va.; erect factory and warehouse; pulverize peanut hulls for an absorbent for excess oil on tinplate; A. E. Ittner, Contr.

Ga., Albany—Peanut Hulls.—Bain Peanut Co.; erect peanut hull pulverizing plant.

Ga., Douglas — Redrying Tobacco.—China-American Tobacco Co., Rocky Mount, N. C.; lease building to be erected by Georgia Stemmer & Tobacco Co.; 200x150-ft. building; brick; redrying plant complete; R. N. McEachern, Constr. Engr. and Contr.

Ga., Savannah—Cigars.—Penniman-Halle Co. inceptd.; capital \$50,000; W. Frederick Penniman, Samuel W. M. Hales.

Ky., Louisville — Tannery. — Excelsior Oak Tanning Co.; increased capital from \$50,000 to \$100,000.

Ky., Louisville — Paints. — Louisville Paint Mfg. Co.; increase capital from \$40,000 to \$80,000.

Ky., Paducah—Buttons.—McKee & Bliven Button Co., Muscatine, Iowa; purchased site; establish button plant. (A. S. McKee, Uniontown, Ky., lately noted to establish button factory.)

Ky., Paintsville—Paints.—Van Paint, Oil & Gas Corp. chartered; capital \$25,000; A. W. Phillis, C. T. Rule, Mrs. Edna Kirk Conley.

Ky., Louisville—Peanuts.—Ohio Valley Peanut Co. inceptd.; capital \$10,000; Roger Dearing, Ivan L. Wolf, Wm. A. House.

Ky., Maysville—Ice Cream, etc.—Traxel-Glascock Dairy & Ice Cream Co.; increase capital from \$15,000 to \$25,000.

La., Swartz—Carbon Black and Gasoline.—J. M. Huber, 65 W. Houston St., New York; build carbon-black mfg. and gasoline-extraction plant; special fireproof buildings; install \$300,000 mchy.; all contracts awarded; Hope Engineering Co., Engr., Mt. Vernon, O.; Brutus Gundlach, Archt., 150 Nassau St., New York. (Supersedes recent item under Monroe.)

Md., Baltimore—Chemicals.—Mutual Chemical Co., Block and Wills Sts.; erect 2 factory buildings; 2 stories; 200x174.6 ft. and 176x163 ft.; \$90,000.

Md., Baltimore—Bakery.—E. M. Koster, 643

W. Lexington St.; erect 3-story 70x40-ft. addition; brick; Jno. Freund, Archt., 1307 St. Paul St.

Md., Baltimore—Clothing.—Herman, Schuman & Glazer, 222 W. Camden St., inceptd.; capital \$250,000; Philip Herman, Ike Schuman, Philip Glazer.

Md., Baltimore—Food Products.—Charles G. Summers Co., Russell & Worcester Sts., inceptd.; capital \$50,000; Eli Frank, Bernard R. Youngman, C. Jno. Beeuwkes.

Md., Baltimore—Suspenders, etc.—Knothe Bros., 154 5th Ave., New York; erect 1-story 96x60-ft. additional story and 2-story 35x27-ft. addition; brick; Oliver H. Wight, Archt., Munsey Bldg. (Supersedes recent item.)

Md., Baltimore—Awnings, etc.—Guilford Awning Shade & Upholstery Co., 524 Ethelwood Ave., inceptd.; capital \$12,000; Chas. A. Kirby, Geo. N. Brian, Elizabeth McCreary.

Md., Ridgely. — Walter M. Gleske, Archt., Gunther Bldg., Baltimore, Md.; has plans for erection factory building; concrete block; M. C. Smith represents owner; invites bids.

Miss., Hattiesburg.—Hercules Powder Co., Wilmington, Del.; build \$500,000 plant; mfr. turpentine, pine oil and rosin; purchased mchy.; leased 100,000 acres timber land for pine stumps; let contract for 16 buildings to Arthur D. Little, Inc., Cambridge, Mass.; W. A. Smyth, Constr. Engr. at Hattiesburg.

Miss., Laurel—Cigars.—Consolidated Cigar Corp., A. L. Coon, Representative, care Laurel Chamber of Commerce; contemplates establishing branch cigar factory.

Mo., Kansas City — Paper Boxes.—Pearson Paper Box Co., 23d and Charlotte Sts.; erect 1 and 2-story and basement 127x125-ft. factory building; brick, stone trimming; R. A. Curtis, Archt., 536 Reserve Bank Bldg.

Mo., St. Louis—Macaroni.—Liberty Macaroni Co., 5125 Bischoff Ave., organized; Vincent Italian, Prest.; Dominick La Ferla, Secy.; Antonio Monticciolo, Mgr.; has 80x40-ft. building. (Lately noted inceptd., capital \$20,000.)

N. C., Fayetteville — Paints.—Fayetteville Paint Co. inceptd.; capital \$50,000; C. C. Ashlin, J. P. Sanders, O. W. Holmes.

N. C., Mt. Airy—Chestnut-wood Extract.—C. C. Smoot & Sons Co., Chas. C. Smoot, Asst. Mgr., North Wilkesboro, N. C.; has building; establish branch plant; purchased mchy. to mfr. chestnut-wood extract.

N. C., Badin—Skirts, etc.—Capital Skirt Co., S. Snyder, Mgr., Charlotte, N. C.; capital \$50,000; establish factory to mfr. ladies' skirts, middie suits, etc.

N. C., Winston-Salem — Chemicals.—Click Chemical Co., mfg. chemists, organized; capital \$100,000; R. C. Click, Prest.; A. F. Messick, Secy.; J. J. Jones, Treas.-Supt.; occupy temporary location; plans installing plant. (See Machinery Wanted—Bottling Equipment.)

N. C., Winston-Salem—Tobacco.—R. J. Reynolds Tobacco Co.; increase capital from \$40,000,000 to \$80,000,000.

Okla., Miami—Shirts.—Oberman Shirt Co.; erect 2-story factory building.

Okla., Oklahoma City—Candy.—Rose Candy Co., R. A. Rose; purchased building; remodel and enlarge \$15,000; install \$20,000 steam equipment, heated by oil burners; install mchy.; daily capacity 1200 lbs. candy.

S. C., Charleston—Asbestos and Rubber.—General Asbestos & Rubber Co., Jno. P. Thomas, Treas., Charleston; increase capacity.

S. C., Greenville — Loom Harness. — Acme Loom Harness & Reed Co., J. F. Richardson, Prest.; rebuild burned plant; loss \$22,000.

Tenn., Memphis—Drugs.—Bellevue Labora-

tories inceptd.; capital \$50,000; Wm. R. Larry, Fred G. Beurer, Neil Callahan.

Tenn., Memphis — Biscuits. — Union Biscuit Co., St. Louis, Mo.; erect \$300,000 branch plant; E. C. Bondurant, Local Mgr.

Tex., Amarillo—Bottling.—Whistling Bottling Co. inceptd.; capital \$20,000; H. A. Conley, Minnie Walker, W. S. Edwards.

Tex., Goose Creek—Drugs.—State Drug Co. inceptd.; capital \$14,000; W. W. and H. S. Leggett, A. L. Ross.

Tex., Dallas—Brooms.—Dallas Broom Factory; increase capital from \$6000 to \$10,000.

Tex., Fort Worth—Batteries.—Standard Battery Mfg. Co., Inc.; capital \$75,000; Albert Kramer, J. J. King, A. F. Hawkins.

Tex., Fort Worth—Extracts.—Prall-Huff Co. inceptd.; capital \$50,000; C. M. Prall, J. P. Huff, J. H. Watkins.

Tex., Greenville—Novelties.—Porter Leather Novelty Co. inceptd.; capital \$40,000; R. C. and J. E. Nelms, J. F. Morris.

Tex., Sweetwater—Soaps.—Texas Product Mfg. Co., N. A. Harper, Prest.-Mgr.; erect 281x250-ft. fireproof building; reinforced concrete; install soap-mill mchy.; daily capacity 50 tons soap; bids until June 1. (See Machinery Wanted—Soap Machinery.)

Tex., Wichita Falls—White Lead Products.—General Reduction & Chemical Co., Salt Lake City, Utah; build large plant.

Va., Appomattox—Tobacco.—W. L. Brown, Contr.; erect tobacco factory.

Va., Danville—Tobacco.—Dibrell Bros.; increase capital from \$1,000,000 to \$1,600,000.

Va., Portsmouth — Building Materials.—National Mfg. Co. inceptd.; capital \$50,000; C. E. Griffin, Prest.; C. J. Lindeman, Secy., both Norfolk, Va.

Va., Richmond—Industrial Building.—Union Security Co.; erect \$145,000 wholesale and manufacturing building.

Va., Richmond—Tobacco.—Hallott & Pratt, Archts., Mutual Bldg.; have plans for erection 2-story 110x75-ft. factory building; brick and reinforced concrete.

Va., Richmond—Blotting Paper.—Standard Paper Mfg. Co., Jas. P. Ryland, Secy.-Treas.; erect addition; steel reinforced concrete paper mill unit, containing "102" Fourdrinier machine, with beaters, washers, boilers, power plant and finishing mchy.; \$500,000; Jos. H. Wallace & Co., Archts.-Engrs., Temple Court Bldg., New York.

Va., Richmond—Tobacco.—Larus Bros., Wm. T. Reed, 210 E. Main St.; erect 5-story and basement 131x120-ft. factory building; reinforced concrete; install steam heating and 400 H. P. power plant; J. E. Sirrine, Greenville, S. C., and Carneal & Johnston, Richmond, Va., associated as Engrs.-Archts.; Jno. T. Wilson, Contr., Richmond. (Supersedes recent item.)

W. Va., Huntington—Lamp Shades.—Three-Leaf Lamp Shade Co. inceptd.; capital \$25,000; J. Broh, C. H. Bronson, A. D. Sees.

W. Va., Martinsburg—Drugs.—Nuvim Products Co. inceptd.; capital \$600,000; Percy D. Leah, Martinsburg; Frank M. Nusser, Philadelphia, Pa.; F. V. Ijams, New Martinsville, W. Va.

W. Va., Wheeling — Coca-Cola. — Wheeling Coca-Cola Bottling Works; increase capital from \$25,000 to \$50,000.

Motor Cars, Garages, Tires, Etc.

Ark., Little Rock—Automobiles.—555 Automobile Co.; occupy building to be erected by Hardin Bale.

Ark., Stuttgart—Tractors.—American Tractor & Harvester Co. inceptd.; capital \$100,000; Stanley White, George Jensen, B. E. Swim.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Fla., Lakeland—Garage.—Sammon & Weeks; occupy \$20,000 garage to be erected by J. H. Melton.

Fla., Lakeland—Garage.—L. W. Yarnall; erect garage.

Fla., Jacksonville—Automobiles.—Southern Automobile Co. Inceptd.; capital \$25,000; J. E. Sheldon, Prest.; L. V. R. Townsend, Secy.-Treas.; E. W. Cone.

Ga., Atlanta—Truck Mfg.—Kleiber Motor Truck Co., Paul Kleiber, Prest., 1480 Folsom St.; erect 90x250-ft. building; steel frame; brick walls; steel sash; corrugated-iron roof; fireproof; \$65,000; build 1 to 5-ton-capacity motor trucks; daily capacity 1 truck; Richard tum Suden, Engr., 625 Market St., San Francisco, Cal. (Lately noted.)

Ky., Newport—Garage.—D. R. Stapp, 5th and Monmouth Sts.; erect 1-story and part basement garage; brick walls; concrete floors; I. H. Wilson, Archt., 10 4th St.

Ky., Owensboro—Tires.—Central Tire Co. Inceptd.; capital \$10,000; H. H. Smith, D. W. Kendall, J. N. Snyder.

Ky., Lexington—Motors.—Anderson Motor Sales Co. Inceptd.; capital \$10,000; J. L. Mallin, Nelson Smith, A. E. Smith.

Ky., Louisville—Garage.—W. E. Ross, 1123 Cherokee Rd.; erect 5-story and basement 90x120-ft. garage; brick; concrete; Gaffney & Epping, Archts., 437 S. 2d St.

Ky., Louisville—Garage.—Kentucky Motor Sales Co., 628 S. 3d St.; erect 1 and 2-story garage; concrete; Joseph & Joseph, Archts., 608 S. 4th St.

Ky., Louisville—Garage.—Puritan Garage, 1241 4th St.; erect 2-story 38x130-ft. addition to garage; reinforced concrete; slab; T. J. Nolan, Archt., 235 Courier-Journal Bldg.

La., Lake Charles—Garage.—Lester Automobile Co.; occupy 1-story 50x100-ft. garage; brick; plate glass; \$15,000; to be erected by P. Oliver & Sons; Gayle Hardware Co., Contr.

La., New Orleans—Automobiles.—Alberto Vales; erect automobile building.

Md., Baltimore—Garage.—Frederick W. Kahl, 3004 W. Presstman St.; erect garage; brick; \$200,000; site, 296x248 ft.

Md., Baltimore—Garage.—Louis Blaustein, 2312 Callow Ave.; erect 2 and 1-story 57x139-ft. garage; brick; Geo. R. Callis, Archt., American Bldg.

Md., Baltimore—Garage.—Dorn Motor Corp., H. S. Dorn, Prest., 35 N. Bentalou St.; erect 1-story 50x100-ft. garage; brick; Thos. Machen, Archt., Fidelity Bldg.

Md., Baltimore—Garage.—W. Procter, 802 Patterson Park Ave.; erect 2-story garage; brick.

Md., Baltimore—Garage.—Federal Motor & Sales Co., 803 Low St., Sidney L. Bachrach, Secy.-Treas.; erect 3-story 128x130x196-ft. garage; triangular; first and second floors, concrete; third floor, wood; structural steel; slag roof; cement and wood floors; city lights; freight elevator; \$110,000; J. L. Robinson Construction Co., Contr., Carrollton and Lafayette Aves.; Harry A. Loane, Archt., Builders' Exchange. (Lately noted.)

Md., Cumberland—Tire Mfg.—Kelly-Springfield Tire Co., Akron, O.; construct 3 and 4-story 620x575-ft. factory building; concrete, steel and brick; reported cost \$2,000,000 to \$3,000,000.

Md., Hagerstown—Garage.—Hagerstown Foundry Co., A. T. Zentmeyer, 8 N. Jonathan St.; erect 2-story 60x80-ft. garage and machine shop; reinforced concrete; A. J. Klinkhart, Archt., 54 W. Washington St.

Mo., Kansas City—Service Station.—Killarney Investment Co., care of Wilkinson & Crans, Archts., 500 Reliance Bldg.; erect serv-

ice station; 1 story and basement; 100x132 ft.; brick; stone trimming; Wm. Jewell, Jr., Contr., 417 Rialto Bldg. (Lately noted.)

Ky., Lexington—Garage.—Sullivan & Baugh; erect garage.

Mo., Kansas City—Automobiles.—Weaver Motor Co., 1523 Grand Ave.; occupy 2-story and basement 100x100-ft. building to be erected by Scarritt Estate, care of C. W. Scarritt, 231 Scarritt Bldg.; brick; stone trimming; composition roof; Root & Siemens, Archts., 1202 Scarritt Bldg.

Mo., Kansas City—Garage.—A. Stunda, 6th and Grand Aves.; erect 1-story and basement 75x95-ft. garage; James Flanagan, Contr., 2836 Benton Blvd.; H. A. Noble, Archt., 411 Reliance Bldg.

Mo., St. Louis—Service Station.—Traffic Motor Truck Corp., Guy Wilson, Prest., 5200 N. 2d St.; erect 1-story 150x150-ft. service building; Murch Bros. Construction Co., Contr., Railway Exchange Bldg.

N. C., Asheville—Tires.—Record Tire Co. Inceptd.; capital \$20,000; W. D. Edwards, E. F. Jeffries, C. F. McRae.

N. C., Charlotte—Garage.—Anderson Sales Motor Co., North Tryon and Catherine Sts.; erect 2-story 50x99-ft. garage; brick; metal; \$10,000 to \$12,000; Thies-Smith Realty Co., Contr.

N. C., Greensboro—Garage.—W. F. Ross; erect 2-story garage on 60x50-ft. site; \$30,000 to \$50,000.

N. C., Greensboro—Garage.—Mr. Fortune, Mr. Tennille; erect garage.

Okla., Altus—Garage.—O. L. Phipps, Frederick, Okla.; erect 1-story 75x140-ft. garage; brick; concrete; gravel roof.

Okla., Oklahoma City—Tires.—Hall Bros. Tire & Supply Co. Inceptd.; capital \$35,000; J. G. March, H. K. Richardson, Grover Hall.

Tex., Corpus Christi—Garage.—Texas Motor Sales Co.; erect garage addition; reinforced concrete; floor space 50x60 ft.; \$5,000; Dale & Birmingham, Contrs.

Tex., Dallas—Filling Stations.—Magnolia Petroleum Co.; erect 3 filling stations; \$30,000.

Tex., Fort Worth—Garage.—J. C. Heitman; erect 73x103-ft. garage; cement; \$20,000 to \$25,000; Van Slyke & Woodruff, Archts.

Tex., Fort Worth—Motors.—Ed Rau Motor Co. Inceptd.; capital \$20,000; W. C. Lackey, Ed Rau, G. S. Lackey.

Tex., San Antonio—Automobiles.—Diamond Automobile Supply Co. Inceptd.; capital \$150,000; W. R. Sein, P. G. Callwell; R. E. Isom.

Tex., Stamford—Garage.—Stamford Motor Co. Inceptd.; capital \$60,000; N. L. Davis, S. S. McCord, O. P. Harlan.

Va., Bristol—Automobiles.—Sheldon Garage, Motor & Supply Corp. chartered; capital \$30,000; Frank Stoneburner, Prest.; S. Brauce Jones, Secy.; both Bristol; W. F. Nulr, Washington, D. C.

Va., Lynchburg—Filling Station.—W. L. Clark; erect 2-story filling station; Stanhope S. Johnson, Archt., People's Bank Bldg.

Va., Richmond—Automobiles.—J. D. Disney, D. J. Cole, Murphy's Hotel; erect auto sales building; 3 stories and basement; 60x140 ft.; brick; T. H. Barnham, Archt., Chamber of Commerce Bldg.

Va., Roanoke—Service Station.—Gibson & Packett, care of J. W. Boswell, First National Bank Bldg.; erect service and sales building; brick; H. M. Iler, Archt., 3½ Campbell Ave.

Va., Roanoke—Garage.—E. L. Frost and S. T. Beveridge, 1318 E. Cary St.; erect 1½-story 120x140-ft. garage; Bass & Bros., Contrs., 708 Bainbridge St.; H. T. Burnham, Archt., Chamber of Commerce Bldg.

Va., Roanoke—Garage.—W. T. Hawks, 918

W. Cary St.; erect 1-story 90x60-ft. garage; A. C. Houston & Son, Contrs., 9 S. 6th St.; A. F. Hunt, Archt., Old Dominion Trust Bldg.

Railway Shops, Terminals, Roundhouses, Etc.

Ark., El Dorado—Chicago, Rock Island & Pacific R. R., H. G. Clark, Ch. Engr., Chicago, Ill.; rebuild roundhouse; loss \$100,000.

Tex., Houston—City, Mayor Amerman; improve shops, power-house and barn; \$63,000; install block signals; \$20,000; feed lines; \$14,600.

Road and Street Construction.

Ala., Birmingham—Jefferson County Board of Revenue, Jerry W. Gwin, Prest.; awarded \$394,024 road-grading contracts, involving 5½ mi., as follows: Pat Wallace, Bessemer, Ala., \$125,005.50, 3 contracts, totaling 20 mi.; J. A. Dabbs, Bessemer, Ala., \$72,175, 8 mi.; A. F. Bearden, Birmingham, \$108,020.50, 2 contracts, totaling 10½ mi.; Acton & Self, Trussville, Ala., \$27,095, 5 mi.; Kershaw Construction Co., Birmingham, \$31,198.50, 5 mi.; J. B. Rylant, Huffman, Ala., \$14,700, 3 mi.; John and Ira Parsons, Birmingham, \$14,020, 3 mi.; also let \$1,137,561. Contracts for 3½ mi. sheet asphalt paving on 5 to 6-in. concrete base, as follows: Dunn Construction Co., Birmingham, \$822,414.19, 4 contracts, totaling 28 mi.; H. N. Bowdry, Birmingham, \$315,147.37, 3 contracts, totaling 8½ mi.; plans total expenditure \$2,000,000 for paving; open bids June 7 for remaining 13 mi., costing \$486,000; S. R. Batson, Highway Engr., 406 Jefferson Bank Bldg.

Ala., Birmingham—Jefferson County Board of Revenue, Jerry W. Gwin, Prest.; awarded \$433,535 road-grading contracts, involving 6½ mi., as follows: Pat Wallace, \$49,235, 10 mi. grading between Warrior and Robbins crossroads; \$23,560, 3 mi. road between Palos and Praco; \$41,560.50, 5 mi. grading between Warrior and Coaldale; \$10,650, 2 mi. Sadler's Gap; J. A. Dabbs, \$72,175, 8 mi. road between Oak Grove and Adger; A. F. Bearden, \$80,145, 8 mi. Rocky Ridge road; \$27,575.50, 2½ mi. road between Irontdale and Pole Cat Gap; Acton & Self, \$27,965, 5 mi. road between Trussville and Acmar; Kershaw Construction Co., \$31,198.50, 5 mi. road between Clay and Trussville; J. B. Rylant, \$14,700, 3 mi. Mount Pinson to Center Point road; John and Ira Parsons, \$14,020, 3 mi. road between Pleasant Hill and Morgan; will let \$1,500,000 paving contracts; S. R. Batson, Highway Engr., 406 Jefferson Bank Bldg. (Lately noted.)

Ala., Demopolis—City, J. I. Lee, Mayor; pave streets; \$90,000 available; bids about May 15; Robert L. Totten, Engr., Birmingham, Ala. Supersedes recent item. (See Machinery Wanted—Paving.)

Ala., Troy—City; pave North Three Notch St.; C. C. Barber, Contr.

Ark., Jonesboro—City Commrs., Improvement Dists. 20 and 21, Dan L. Jones, Secy.; pave streets; 31,965 sq. yds. asphaltic concrete; 35,164 lin. ft. concrete curb and gutter, etc.; bids until May 10; Cobb & Lee, Engrs. (See Machinery Wanted—Paving.)

Ark., Mountain Home—Baxter County Commrs.; construct 13.07 mi. macadam road from Cotter to Mountain Home; culverts; Highway Construction Co., Contr., Springfield, Mo. (Lately noted inviting bids.)

Ark., Texarkana—City; improve streets; \$600,000. Address The Mayor.

Fla., Pensacola—City Commrs.; pave Alabama Square; John Gerkins, Contr.

Fla., Tampa—Hillsborough County Commrs., Jas. G. Yeats, Chrmn.; construct 23 mi. roads; asphalt block; Davis & Webb, Contrs. (Lately noted inviting bids.)

Fla., St. Augustine.—St. Johns County Commissioners, Obe P. Goode, Clerk; construct 111.1 mi. road; 58 bridges; bids until May 11; changed date from Apr. 20; Gould T. Butler, Engr. (See Machinery Wanted—Road Construction.)

Ga., Baxley.—Appling County Comms. Roads and Revenues; improve and construct roads; vote May 12 on \$230,000 bonds.

Ga., Jefferson.—Jackson County Comms. Roads and Revenues; construct 7.14 mi. road from Apple Valley to Commerce; \$87,972.14; Hagerdorn Construction Co., Contr., Montgomery, Ala.; T. P. Wright, Engr., 406 Walton Bldg., Atlanta, Ga. (Lately noted inviting bids.)

Ga., Macon.—Bibb County Comms., J. Ross Bowdre, Clk.; construct 4 mi. Columbus road; 42,092 sq. yds. concrete, bituminous macadam, willite or Kentucky rock asphalt paving; bids until June 4; changed date from Apr. 20; S. R. Shi, Engr., 313 Grand Bldg. (See Machinery Wanted—Paving.)

Ga., Savannah.—City, J. W. Motte, Director Public Works; pave West Broad St.; 55,600 sq. yds. vibrolithic concrete; \$142,290.70; Dixon Contracting Co., Contr. (Lately noted inviting bids.)

Ga., Waycross.—Ware County Comms.; construct roads in 11th Dist.; plan \$40,000 bond issue.

Ky., Carlisle.—Nicholas County Comms., Jno. F. Sugg, Clk.; repair and reconstruct 8 mi. Carlisle and Miller Station Turnpike; bids until May 14. (See Machinery Wanted—Road Construction.)

La., Alexandria.—Rapides Parish Police Jury, T. C. Wheaton, Prest.; grade and construct culverts on 3½ mi. Bayou Rapides road; bids opened May 10; Ira W. Sylvester, Engr.

La., Thibodaux.—La Fourche Parish Police Jury; complete gravel road between Lockport and Raceland; vote June 15 on \$50,000 bonds.

Md., Chestertown.—Town, Chas. N. Satterfield, Commr.; pave streets; install additional fire equipment, etc.; vote on \$10,000 bonds.

Md., Mt. Airy.—City, A. R. Molesworth, Mayor; improve streets and water system; voted \$22,000 bonds.

Md., Walkersville.—Town; improve streets; voted \$20,000 bonds. Address The Mayor.

Miss., Charleston.—City, J. W. Saunders, Mayor; construct 35,000 sq. yds. paving; concrete, asphaltic concrete and gravel; 13,000 lin. ft. concrete curb or curb and gutter; 1600 lin. ft. sewer pipe; bids until May 18; Dabney Engineering Co., Engr., Memphis, Tenn. (See Machinery Wanted—Paving.)

Miss., Meridian.—City, Mayor Dabney, Mayor; pave Twenty-fourth Ave. and repair paved streets; voted \$215,000 bonds. (Lately noted to vote.)

Mo., Boonville.—Cooper County Comms., R. D. Pealer, Clk.; construct roads in Bethlehem Road Dist.; voted \$18,000 bonds.

Mo., Clayton.—St. Louis County Comms.; construct 12.86 mi. State road, Project 79; culverts; bridges; bids until May 12; Wm. Elbring, Engr. Supersedes recent item. (See Machinery Wanted—Road Construction.)

Mo., Boonville.—Cooper County Comms. Bethlehem Special Road Dist., A. W. Nelson, Bunceton, Mo.; improve roads; \$18,000 bonds.

Mo., Jefferson City.—City; pave Madison St.; bituminous macadam; bids until May 18; Linn F. Brown, City Engr. (See Machinery Wanted—Paving.)

Mo., Jackson.—State Highway Board, Jefferson City, Mo.; construct 3.18 mi. State road, Project No. 52, from Cape Girardeau; culverts and bridges; bids until May 17; Alexander W. Graham, State Highway Engr.,

Jefferson City. (See Machinery Wanted—Road Construction.)

Mo., Kansas City.—City, Jas. *Cowgill, Mayor; pave and curb Broadway, etc.; 18-in. concrete base with sheet-asphalt top.

Mo., Springfield.—Greene County Comms.; construct roads in Stockton Road Dist.; voted \$8000 bonds.

N. C., Bakersville.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.; construct 5.04 mi. State Highway in Mitchell County; Federal-aid Project No. 94; 26,360 sq. yds. bituminous macadam; 6340 lbs. reinforcing steel; bids until May 14; W. S. Fallis, State Highway Engr., Raleigh. Supersedes recent item. (See Machinery Wanted—Road Construction.)

N. C., Durham.—State Highway Comsn., Raleigh, N. C.; hard-surface 6.3 mi. road from Durham to Chapel Hill; Federal-aid Project 71; construction by day labor.

N. C., Marion.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.; construct 6.76 mi. State Highway in McDowell County; Federal-aid Project No. 84 A; 16,610 cu. yds. topsoil surfacing; bids until May 14; W. S. Fallis, State Highway Engr., Raleigh, N. C. Supersedes recent item. (See Machinery Wanted—Road Construction.)

N. C., Morgantown.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.; construct 8.33 mi. State Highway in Burke and McDowell counties; Federal-aid Project No. 84B; 20,469 cu. yds. topsoil surfacing; bridges and culverts; bids until May 14; W. S. Fallis, State Highway Engr., Raleigh. Supersedes recent item. (See Machinery Wanted—Road Construction.)

N. C., Oxford.—City, R. B. Hines, Clerk; construct 2000 sq. yds. concrete paving; 2246 lin. ft. curb and gutter; \$11,000 available; R. G. Lassiter & Co., Contrs., Mr. Moran, Engr. (Lately noted inviting bids.)

N. C., Sylva.—North Carolina State Highway Comsn., Division Office, Asheville, N. C.; construct 4.83 mi. State Highway in Jackson County; Federal-aid Project No. 75; 7795 cu. yds. topsoil surfacing; bids until May 14; W. S. Fallis, State Highway Engr., Raleigh, N. C. Supersedes recent item. (See Machinery Wanted—Road Construction.)

Okla., Ada.—City Comms.; pave 160,000 sq. yds. concrete and rock asphalt paving; bids in June; \$900,000; Johnson & Benham, Const. Engrs., Firestone Bldg., Kansas City, Mo. Lately noted. (See Machinery Wanted—Paving.)

Okla., Beggs.—Town, W. K. Enochs, Clk.; grade, curb and pave streets in Dist. No. 1; 24,000 sq. yds. brick paving; bids until May 17; Mackintosh Co., Engr. (See Machinery Wanted—Paving.)

Okla., Mangum.—City, G. F. Border, Mayor; improve streets in Dist. No. 1; 40,000 sq. yds. asphaltic concrete; bids until May 18; Johnson & Benham, Const. Engrs., Firestone Bldg., Kansas City, Mo. Lately noted. (See Machinery Wanted—Paving.)

Okla., Madill.—City; pave 70,000 sq. yds. reinforced concrete paving; Johnson & Benham, Const. Engrs., Firestone Bldg., Kansas City, Mo.

Okla., Tishomingo.—Johnston County Commissioners; construct hard-surfaced roads; voted \$380,000 bonds. (Lately noted to vote.)

Okla., Tulsa.—City Comsn.; awarded \$230,149.43 paving contracts; Standard Paving Co., \$162,165.80, pave Cincinnati Ave.; F. P. McCormick, \$27,933.22, pave Victor Ave., and \$40,050.41, pave Sunset Park from Pearl St.

S. C., Bennettsville.—Marlboro County Highway Comms., J. C. Covington, Chrmn.; construct roads and bridges; vote on \$150,000 bonds.

S. C., Hampton.—Hampton County Commissioners; sand-clay 16 mi. road to Yemassee; construction by day labor.

S. C., Rock Hill.—City, E. R. Treverton, City Mgr.; construct 130,000 sq. yds. sheet asphalt paving; 24,000 sq. yds. sidewalk; curb and gutter; storm drainage; Carolina Asphalt Paving Co., Contr., Charlotte, N. C.; Gilbert C. White, Engr., Durham. (Lately noted inviting bids.)

S. C., Union.—Cross Keys Township Highway Comsn. Cross Keys, S. C.; construct 1.78 mi. topsoil road; bids until May 12. (See Machinery Wanted—Road Construction.)

Tenn., Chattanooga.—Hamilton County Comms.; construct 11 mi. roadway; 95,000 sq. ft. concrete; construction by day labor.

Tenn., Columbia.—Tennessee Dept. Highways, Nashville, Tenn.; construct 11.87 mi. rock asphalt surfacing on State Highway No. 10, between Williamson County line and Columbia; 133,277 sq. yds. rock asphalt surfacing; bridge over 20-ft. span; \$360,000 available; Knoxville Construction Co., Contr., Knoxville, Tenn.; W. P. Moore, Chief Engr., Nashville, Tenn. (Lately noted inviting bids.)

Tex., Angleton.—Brazoria County Comms.; improve 6 mi. highway from State Farm to Jones Creek; bridges; L. D. McKaughan, Contr., West Columbia, Tex.

Tex., Austin.—Travis County Comms., Dist. 2, 3 and 4; construct roads; voted \$225,000 bonds. (Previously noted to vote.)

Tex., Bastrop.—Bastrop County Comms.; construct roads in Dist. No. 6; vote June 1 on \$10,000 bonds.

Tex., Center.—Shelby County Comms.; grade, drain and surface 10.9 mi. State Highway No. 9 from Shelbyville to San Augustine county line; T. H. Dillon, Engr.

Tex., Coleman.—Coleman County Comms., Precinct No. 2; construct hard-surfaced road; voted \$120,000 bonds. (Lately noted.)

Tex., Cooper.—Delta County, I. B. Lane, Judge; construct 11.70 mi. gravel road; State Highway No. 39; bids until May 14; Cock & Nagle, Engrs. (See Machinery Wanted—Road Construction.)

Tex., Dallas.—Dallas County, Chas. E. Gross, Auditor; construct 8.9 mi. Scenic road; gravel; \$40,389; Tyler Construction Co., Contr.; W. J. Powell, Engr. (Lately noted inviting bids.)

Tex., Georgetown.—Williamson County Commissioners, H. A. Hodges, Auditor; surface 10 mi. Meridian road, Highway No. 2; 16 ft. wide; limestone rock asphalt; W. E. Dozier, Contr., Dam Blvd., Austin, Tex.

Tex., Gilmer.—Upshur County Comms.; grade, surface and drain 8.988 mi. Culberson highway; 15,352 cu. yds. gravel; Wilder & O'Neal, Engrs., Mt. Pleasant, Tex.

Tex., Groesbeck.—Limestone County Commissioners, J. E. Bradley, Judge; construct roads and bridges in Groesbeck, Thornton and Mexia Dist. 3; bids until May 10; Fred P. Holt, Engr. (See Machinery Wanted—Road Construction.)

Tex., Falfurrias.—Brooks County Comms.; construct road on State Highway No. 12; voted \$100,000 bonds. (Lately noted to vote.)

Tex., Greenville.—Hunt County Permanent Road Board, John L. English, Secy.; improve 14.8 mi. Greenville Wolf City Rd.; bids until May 12; A. D. Duck, Engr., Levy Bldg. (See Machinery Wanted—Road Construction.)

Tex., Junction.—Kimble County, C. R. Stevenson, Judge; grade, surface and drain 24.7 mi. Highway No. 27; Coleman & Jenkins, Contrs., Gunter Bldg., San Antonio, Tex.

Tex., Kingsville.—Kleberg County Comms., Ben F. Wilson, Judge; construct 29.7 mi. gravel road; \$388,365.02; W. T. Montgomery,

Contr., San Antonio, Tex. (Lately noted in-viting bids.)

Tex., Lufkin.—City, L. Mitchell, City Mgr.; construct 4 mi. bituminous pavement, macadam base; curbs and gutters; \$150,000 to \$200,000; Haden & Austin, Contrs., Houston, Tex.; J. J. White, Engr., Tyler, Tex.

Tex., Montague.—Montague County Commissioners; grade, surface and drain 7.47 mi. Highway; Federal-aid Project 123; 16 ft. wide; construction by day labor.

Tex., McKinney.—Collin County, Geo. W. Fox, Auditor; improve 62.3 mi. roads in Dist. Nos. 7, 24, 25, 26, 27, 28 and 29; bids until May 11; J. B. Crockett, Engr. (See Machinery Wanted—Road Construction.)

Tex., Orange.—Orange County, D. C. Bland, Judge; grade, pave and drain 10.26 mi. Orange-Beaumont Rd.; Highway 3; lowest bidder, Houston Construction Co., 3102 McKinney St., Houston, Tex., at \$420,573.

Tex., Sherman.—Grayson County Commrs., Dayton B. Steed, Judge; construct 9 mi. gravel road in Road Dist. No. 6; bids until May 12; Julian C. Feldt, Engr., Denison, Tex. (See Machinery Wanted—Road Construction.)

Tex., Stephenville.—Erath County, E. E. Solomon, Judge; improve roads; 139,357.9 cu. yds. gravel; bids until May 21. (See Machinery Wanted—Road Construction.)

Tex., Weatherford.—Parker County Commissioners, E. A. Swofford, Judge; construct 16.59 mi. State Highway No. 1; bids opened; O. Leonard, County Engr.

Tex., Woodville.—Tyler County Commrs., W. A. Johnson, Judge; construct bridges and culverts; bids until May 12; Hess & Skinner, Engrs., Dallas, Tex. (See Machinery Wanted, Bridge Construction.)

Va., Independence.—Grayson County Supervisors, T. E. Brannock, Clk.; improve roads; \$90,000 bonds.

Va., Stuart.—Patrick County Supvrs.; construct roads; \$50,000 bonds; Federal and State aid, \$150,000.

Va., Norfolk.—United States Engineer Office; construct 7500 ft. concrete road, 16 ft. wide; concrete sidewalk; bids until May 21.

W. Va., Union.—Monroe County Commrs., E. S. McNeer, Clk.; grade and drain road in Sweet Springs Dist.; vote June 2 on \$71,000 bonds.

W. Va., Charleston.—Kanawha County, L. C. Massey, Clerk; construct 2.96 mi. Class A Elk River road; bids until June 2. (See Machinery Wanted—Road Construction.)

W. Va., Gassaway.—City; pave streets and construct sewers; \$50,000 to \$80,000; bids about June 10; Roberts Engineering Co., Engr., 325 The Ruffner, Charleston, W. Va. (See Machinery Wanted—Paving.)

W. Va., Huntington.—City Commrs.; award paving contracts: Duncan & Griffith, \$3492.80 alley between 14th and 15th Sts., \$3985 Twelve-and-One-half alley and \$3840 Five-and-One-half alley; Lucian Bias, \$14,346.80 4th Ave. and \$11,091 28th St.; Amos Trainor, 13th St. and Eight-and-One-half alley; L. J. Gillespie, \$22,517 11th Ave. and \$42,764 9th Ave.

W. Va., Warwood.—City of Wheeling, W. Va., Charles Ephlin, Mgr.; grade, curb and pave streets with concrete; bids opened May 11; Orion Koller, Engr., Warwood.

W. Va., Worthington.—City; pave streets and alleys; vote June 1 on \$3500 bonds. Address The Mayor.

Sewer Construction.

Ala., Birmingham.—Julian Kendrick, City Engr.; construct sanitary sewers; bids until May 11.

Ark., Stephens.—City; install sewer and electric-light systems. Address The Mayor.

Ark., Sulphur Springs.—Harry Hanf; install sewer, water and light systems; improve grounds; erect 2 residences.

Ga., Camp Benning.—Constructing Quartermaster; complete sewer and water systems; bids until May 10.

Md., Millington.—Town, R. J. Taylor, Clk.; construct sewer system; vote May 22.

Miss., Charleston.—City, J. W. Saunders, Mayor; lay 1600 lin. ft. 12 to 30-in. sewer pipe; bids until May 18; Dabney Engineering Co., Memphis, Tenn. (See Machinery Wanted—Pipe.)

Mo., Mexico.—City, J. W. Gallagher, Acting Mayor; construct sewage-disposal plants and outfall sewers; bids until May 10; Black & Veatch, Consult. Engrs., Suite 701 Mutual Bldg., Kansas City, Mo. (See Machinery Wanted—Sewer Construction.)

N. C., Sylva.—City Commn.; install sewer and water systems; \$90,000; J. B. McCrary Co., Engr., Atlanta, Ga.

S. C., Batesburg.—Commrs. of Public Works, J. B. Holman; construct sewer and water systems; two 34,000 lin. ft. 8 to 10-in. septic tanks; 12-in. vitrified clay pipe; 56 manholes, 10 flush holes; bids until May 27; Nisbet Wingfield, Consult. Engr., Augusta, Ga. (See Machinery Wanted—Sewer Construction.)

S. C., Chester.—Baldwin Cotton Mills; improve sewage-disposal plant and mill village; Tucker & Laxton, Gen. Contrs.; Waldrop & Co., Plumbing Contrs.; all Charlotte, N. C.

S. C., Rock Hill.—City, V. B. Blankenship, Mayor; extend sewer system; \$45,000; Gilbert C. White, Engr., Durham, N. C.; Tucker & Laxton, Inc., Contrs., Charlotte, N. C. (Lately noted bids until Apr. 22.)

Tex., Palacios.—City, J. W. Sartwell, Mayor; install \$34,000 sewer system and disposal plant; 2000 inhabitants; bids until June 1. Lately noted. (See Machinery Wanted—Pipe; Sewer Disposal Plant.)

Va., South Hill.—City; install sewer and water systems. Address The Mayor.

Va., St. Paul.—City; install sewer and water systems; \$100,000. Address The Mayor.

W. Va., Gassaway.—City; construct sewer system; paving; \$50,000 to \$80,000; bids about June 10; Roberts Engineering Co., Consult. Engr., 325 The Ruffner, Charleston, W. Va. (See Machinery Wanted—Sewers.)

Shipbuilding Plants.

Md., Fairfield.—Headhouse.—Union Shipbuilding Co., F. C. Stauffgen, Mgr.; erect 1-story 75x45-ft. brick headhouse for marine railway.

Telephone Systems.

Ala., Thomaston.—Thomaston Telephone Co. (lately noted inceptd., capital \$12,500) organized; O. D. Carlton, Pres.; E. G. Thomas, V.-P.; M. A. Burklow, Secy.-Treas. and Mgr.; install 40 or 50 mi. line. (See Machinery Wanted—Telephone Supplies.)

Ky., Denver.—Twin Branch Telephone Co. inceptd.; H. S. and B. F. Spradlin, James B. Lemaster.

Ky., Font Hill.—Robertson Telephone Co. inceptd.; Henry and Leona Smith, J. A. Irvin.

Ky., Rhodella.—Justrite Telephone Co. (lately noted inceptd., capital \$3000) organized; H. G. Vessells, Pres.; install equipment. (See Machinery Wanted—Telephone Equipment.)

N. C., Kinston.—Carolina Telephone & Telegraph Co.; improve plant; \$50,000.

Tenn., Memphis.—Western Union Telegraph Co., 2d and Monroe Sts.; erect 75x150-ft. 3-

story and basement building; fireproof construction; \$250,000; James Construction Co., Contr.; Hanker & Cairns, Archts.; Gardner & Howe, Consult. Engrs. (Lately noted building to be erected by C. H. and Edward L. Boyle.)

Textile Mills.

Ala., Selma.—Sheetings.—Rabell Mfg. Co.; increase capital from \$150,000 to \$250,000.

Ala., Talladega.—Hosiery.—Talladega Knitting Mills inceptd.; capital \$40,000; C. N. Lanier, Pres.; Grace Jemison, Secy.; A. W. Hardin, Treas.; succeeds Hicks Hosiery Mills.

N. C., Lexington.—Hosiery.—Shoaf-Sink Hosiery Mill Co., H. E. Shoaf, Pres.; erect building; first floor 60x30 ft., second floor 60x60 ft.; install 60 knitting machines; purchased \$40,000 mchy. (Lately noted organized, capital \$100,000.)

N. C., Marion.—Hosiery.—McDowell Hosiery Mills organized; J. E. Kanipe, C. F. James and L. R. McCurry; purchased building; ordered mchy.

S. C., Gaffney.—Cotton Cloth.—Musgrove Mills, W. C. Hamrick, Pres.; erect 3-story 290x107-ft. building; reinforced concrete; install 15,000 spindles, individual electric drive, fire apparatus, humidifiers, etc.; erect warehouse and steam-power plant; J. E. Sirrine, Archt.-Engr.; Shackelford & Potter, Contrs.; all Greenville, S. C. (Supersedes recent item.)

S. C., Greenville.—Cotton Products.—Woodside Cotton Mills; increase capital from \$1,750,000 to \$5,000,000.

S. C., Greenville.—Sheetings.—Brandon Mills; build addition; 2-story 265x132 ft. duck mill; reinforced concrete and mill construction; install 8000 spindles; construct 2-story 100x100-ft. warehouse; install steam-power plant; J. E. Sirrine, Engr.; Flske-Carter Construction Co., Contr.

S. C., McColl.—Tire Fabrics.—Marlboro Cotton Mills; increase capital from \$1,500,000 to \$3,000,000.

S. C., Rock Hill.—Print Cloths.—Arcade Cotton Mills, Alexander Long, Pres.; enlarge mill; purchased 6500 additional spindles.

S. C., Spartanburg.—Print Cloth, etc.—Saxon Mills; increase capital to \$1,000,000.

Tenn., Memphis.—Knit Goods.—Star Knitting Mills; increase capital from \$50,000 to \$100,000.

Va., Big Stone Gap.—F. Y. Kitzmiller Co., F. Y. Kitzmiller, Gen. Mgr., 1130 Moss St., Reading, Pa.; erect 1-story 640x50-ft. hosiery mill; Berks Construction Co., Gen. Contr., Baer Bldg., Reading, Pa., and Big Stone Gap, Va. (Lately noted.)

Va., Gate City.—Hosiery.—F. Y. Kitzmiller Co., F. Y. Kitzmiller, Gen. Mgr., 1130 Moss St., Reading, Pa.; erect 1-story 200x50-ft. hosiery mill; Berks Construction Co., Gen. Contractor, Baer Bldg., Reading, Pa., and Big Stone Gap, Va. (Lately noted.)

Va., Hopewell.—Artificial Silk.—Du Pont Fiber Silk Co., Leonard A. Yerkes, Pres., Du Pont Bldg., Wilmington, Del.; build mill structures; reinforced concrete and steel frame; Meigs, Bassett & Sadler and B. G. Slaughter, Archts., Stephen Girard Bldg., Philadelphia, Pa. (Lately noted organized, capital \$4,000,000; purchased buildings, etc.)

Water-Works.

Ala., Attalla.—Alabama Water Co., J. B. Weakley, Pres.; lay 6-in. mains to replace 3 and 4-in. mains.

Ark., Sulphur Springs.—Harry Hanf; install water, sewer and electric systems; improve grounds; erect 2 residences.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Ga., Camp Benning.—Constructing Quartermaster; complete water and sewer systems; bids until May 10.

Ga., Pearson.—City; install water and lighting systems; voted \$30,000 bonds. Address The Mayor.

Ga., Soperton.—City, Will Stallings, Mayor; improve water-works; vote June 2 on \$10,000 bonds. (Lately noted vote on May 28.)

La., Lafayette.—City; improve and extend water and electric-light systems.

Md., Millington.—Town, R. J. Taylor, Clk.; construct water system; vote May 22.

Md., Mt. Airy.—City, A. R. Molesworth, Mayor; install water-works; improve streets; voted \$22,000 bonds.

N. C., Sylva.—City Commn.; install water and sewer systems; \$90,000; J. B. McCrary Co., Engr., Atlanta, Ga.

Okla., Duncan.—City; install water-works; voted \$38,000 bonds. Address The Mayor.

Okla., Erick.—City; improve water-works; \$35,000; H. G. Olmstead & Co., Engrs., Oil Exchange Bldg., Oklahoma City.

Okla., Oklahoma City.—City; improve water-works; vote May 25 on \$300,000 bonds. Address The Mayor.

Okla., Paden.—City; improve water-works, including 4 mi. pipe lines, pumping station, tower, and tank with 65,000 gals. capacity, etc.; \$65,000; H. G. Olmstead & Co., Engrs., Oil Exchange Bldg., Oklahoma City.

Okla., Pryor.—City, C. W. Watts, Clerk; improve water-works, including purification plant, pumping station, high line; voted \$35,000 bonds; V. V. Long & Co., Engrs., 1300 Colcord Bldg., Oklahoma City. (Lately noted to vote.)

Okla., Red Fork.—City; improve water-works; \$30,000; H. G. Olmstead & Co., Engrs., Oil Exchange Bldg., Oklahoma City.

S. C., Batesburg.—Comms. of Public Works, J. B. Holman; construct water and sewer systems; 50-ft. diam. concrete reservoir; 150 H. P. boiler, two 500,000-gal capacity pumps; pumping-station addition; 450 tons 6 to 10-in. cast-iron pipe, 10 tons special castings; 29 hydrants, 33 valves; bids until May 27; Nisbet Wingfield, Const. Engr., Augusta, Ga. (See Machinery Wanted—Water-works Construction.)

S. C., Rock Hill.—City, V. B. Blankenship, Mayor; extend water-works; lay 4 to 10-in. cast-iron mains; \$33,000; Gilbert C. White, Engr., Durham, N. C.; Tucker & Laxton, Inc., Contrs., Charlotte, N. C. (Lately noted bids until Apr. 22.)

Tex., Fort Worth.—J. C. Lord, Water-works Commr.; lay 3000 ft. 6-in. main on Ryan St., 1006 ft. on Terrell Ave.

Tex., Garland.—City; install water-works; vote on \$100,000 bonds. Address The Mayor.

Tex., Paris.—City, J. M. Crook, Mayor; improve water-works; build dams; lay pipe lines; \$300,000; J. B. Hawley, Engr., Dallas, Tex. (Lately noted.)

Va., Charlottesville.—City; increase water supply; voted \$200,000 bonds. Address The Mayor. (Lately noted to vote.)

Va., Harrisonburg.—City; increase water supply; erect storage reservoir. Address The Mayor.

Va., Pennington Gap.—City; plans new water supply. Address The Mayor.

Va., South Hill.—City; install water and sewer systems. Address The Mayor.

Va., St. Paul.—City; install water and sewer systems; \$100,000. Address The Mayor.

Woodworking Plants.

Ala., Jackson.—Boxes.—Libby Box Co.; extend present plant; erect employees' houses; secured 7-acre site.

Ark., Bentonville.—Barrels.—H. I. Groom, W. T. Mitchell; have building; remodel for mfrs. barrels; mchy. purchased.

Ark., Mountain Home.—Baseball Bats, etc. Dillen Underhill; establish plant; mfrs. baseball bats, spoons, etc.

Ark., Pine Bluff.—Staves.—Norton-Wheeler Stave Co.; acquired 4000 acres timber; mfrs. staves.

Fla., Apalachicola.—Spindles.—J. F. Warren; establish plant to mfrs. cotton spindles; contemplated.

Ky., Harrodsburg.—Baseball Bats, etc.—Jas. T. Cooke; has 200x30-ft. frame building; purchased sawmill, lathe machine, bolter and turning lathe, with rip and cut-off saws; mfrs., baseball bats, broom handles, etc. (Lately noted.)

Ky., Pembroke.—Cooperage.—Caroland Bros.; re-establish burned cooper shop; loss \$1000.

La., Alexandria.—Cooperage.—Alexandria Cooperage & Lumber Co., C. A. Weis, Prest.; rebuild burned plant.

La., Cedar Grove.—Sash, Doors, etc.—Allen Mfg. Co., Shreveport, La.; increased capital to \$400,000.

Md., Baltimore.—Cooperage.—Kimball-Tyler Co., 261 S. 8th St., inctd.; capital \$200,000; Wm G., Ida H. and J. Edward Tyler, Jr.

Tex., Chireno.—William and Carl Liem, Center, Tex.; establish handle factory; acquired timber tract.

Tex., Port Arthur.—Cooperage.—Pekin Cooperage Co.; increased capital from \$100,000 to \$250,000.

Va., Norfolk.—Boxes.—C. E. Womble & Co.; erect box mill; \$12,000.

W. Va., Deanneville.—Flooring.—Westwood Mfg. Co., Edwards Bldg., Weston, W. Va., organized; S. L. Richards, Prest.; M. B. Sprigg, V-P.; Walter A. Edwards, Treas.; John Hailstone, Secy.; erect mill; mfrs. oak and maple flooring.

W. Va., Morgantown.—Cabinet Works.—Seaman Mill & Lumber Co. inctd.; Noah A. Moore, R. E. Seaman, Earl F. Hall; erect mill for pattern and cabinet work, etc.

Fire Damage.

Ark., El Dorado.—Chicago, Rock Island & Pacific R. R.'s roundhouse; loss \$100,000; H. G. Clark, Ch. Engr., Chicago, Ill.

Ark., Parkin.—I. R. Dye & Co.'s store, loss \$30,000; Red Star Grocery Co.'s building, \$10,000; B. M. Farris Grocery Co.'s store, warehouse and barn, \$15,000.

Ky., Lexington.—Mrs. M. L. Tribble's stock barn, 2 silos, icehouse, 2 sheds and dairy; loss \$15,000.

Ky., Leslie.—Franklin Young's residence near Leslie; loss \$10,000.

Ky., Louisville.—Bourbon Stockyard building; loss \$200,000.

La., Alexandria.—Alexandria Cooperage & Lumber Co.'s plant.

Md., Baltimore.—New Art Clothing Co.'s building, 116 E. Baltimore St.; loss \$75,000.

Md., Baltimore.—Edward Apartments, Brookfield Ave. and Whitelock St., owned by Albert Bondy; loss \$35,000.

Mo., Hughesville.—Dr. J. E. Mitchell's residence; loss \$10,000.

N. C., Henderson.—American Agricultural Chemical Co.'s fertilizer plant; loss \$500,000; general office, 2 Rector St., New York.

N. C., High Point.—Welch Bldg.; loss \$20,000 to \$25,000.

N. C., Marshall.—W. B. Ramsey's residence; loss \$15,000.

N. C., Wade Mecum.—Vade Mecum Hotel, owned by Cicero Tise Estate, A. H. Eller, Administrator; loss \$75,000.

N. C., Winston-Salem.—T. L. Hubbard and S. C. Ripple's residences.

S. C., Greenville.—Acme Loom Harness & Reed plant; loss \$22,000.

Tenn., Johnson City.—W. S. Whiting Lumber Co.'s plant.

Tex., Cameron.—Albert Metocha's store; loss \$20,000.

Tex., Emory.—Emory High School. Address Board of Education.

Tex., Gorman.—Cash Grocery and Market, loss \$16,000; Gambill Bros.' building, \$15,000; Millarky Garage, \$15,000; Dr. E. W. Kimble's building, \$20,000; Howard & Grey, \$15,000; Purdy's Garage, \$10,000.

Tex., Longview.—Longview Steam Laundry plant; loss \$15,000.

Tex., Throckmorton.—Majestic Theater.

Va., Blackstone.—Blackstone Female Institute dormitory; loss \$100,000.

Va., Laurel.—White Lumber Co.'s plant.

Va., Winchester.—Moses O'Brien's residence; loss \$10,000.

BUILDING NEWS

EXPLANATORY.

Buildings costing less than \$10,000 not covered in these reports.

BUILDINGS PROPOSED

Apartment-Houses.

D. C., Washington.—H. R. Hownstein, 1314 F St.; erect \$250,000 apartment-house; 8 stories and basement; 64x87 ft.; brick; reinforced concrete; stone trim; fireproof; Frank Russell White, Archt., 1314 F St.; construction by owner.

D. C., Washington.—F. H. Smith Co.; erect apartment-house, 16th St.; 7 stories; limestone and brick; fireproof; J. H. De Sibour, Archt., Hibbs Bldg.

D. C., Washington.—Howard Etchinson, Davidson Bldg., 15th and K Sts. N. W.; erect 3 apartment-houses on R St. nr. 16th St.; 4 stories; 50x30 ft.; brick and reinforced concrete; fireproof; \$225,000; construction by owner.

Ga., Statesboro.—Ancient Free and Accepted Masons; erect 2-story building.

La., New Orleans.—Louisiana Apartment-House Corp. chartered; capital stock \$100,000; A. L. Smith, Prest.; L. F. Barbier, Secy. and Treas.

Md., Baltimore.—Mount Royal Apartment & Hotel Co.; improve building; probably remodel first floor for stores; construction by owner.

Tex., Dallas.—Scottish Rite Masons, Sam P. Cochran; expend several hundred thousand dollars to enlarge Scottish Rite Cathedral.

Va., Norfolk.—S. J. Ullman and E. E.

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Emanuel; abandoned plans to erect \$30,000 duplex apartment-house; Rossel Edward Mitchell & Co., Archts., Flatiron Bldg. (Lately noted.)

Association and Fraternal.

Ala., Mobile.—Knights of Columbus; erect clubhouse, Government and Warren Sts.; building contains libraries, reading-rooms, gymnasium, swimming pool, etc.

Ala., Selma.—Masonic Order; expend \$10,000 to remodel building.

Ala., Bessemer.—Young Men's Christian Association; erect building; Shattuck & Laver, Archts., 19 S. La Salle St., Chicago.

Ga., Butler.—Pickling Lodge No. 129, A. F. and A. M., and Hodges Chapter No. 60, R. A. M.; erect Masonic temple.

Ky., Hazard.—Masonic Lodge No. 676, E. H. Broshear, Secy.; erect \$50,000 building; 3 stories and basement; 100x30 ft.; Thos. J. Nolan, Archt., Courier-Journal Bldg., Louisville; bids until May 15.

La., Baton Rouge.—Aerie 1083, Fraternal Order of Eagles; erect \$80,000 building; 4 stories and roof garden; Morgan D. E. Hite, Archt., New Orleans. (Lately noted.)

Mo., Independence.—Masonic Order; erect \$150,000 building; 3 stories; reinforced concrete and steel; reinforced concrete floors.

N. C., Rocky Mount.—Ancient Free and Accepted Masons; improve temple; \$35,000.

N. C., Rocky Mount.—Ancient Free and Accepted Masons; improve Temple; \$35,000.

Mo., St. Joseph.—Benevolent Protective Order of Elks; erect \$400,000 clubhouse; 5 stories; fireproof.

N. C., Wilmington.—Young Men's Hebrew Assn., H. Jaffe in charge; erect building.

Okla., Guthrie.—Benevolent Protective Order of Elks; erect \$100,000 building.

Tex., Lufkin.—Independent Order of Odd Fellows, K. Morgan, Grand Master; erect \$50,000 building; 2 stories; brick; 50x120 ft.

W. Va., Logan.—Loyal Order of Moose, A. J. Abbot in charge; erect \$60,000 lodge and office building; 6 stories and basement; 38x120 ft.; brick; Weber & Weber, Archts., Miller Bldg., Cincinnati.

Bank and Office.

Ark., Little Rock.—Dr. Wm. R. Bathurst, 310 Boyle Bldg.; considering 2-story addition to 3-story building; brick; install elevator, etc. Address Winston P. Wilson, Mgr., 213-15 W. 2d St.

D. C., Washington.—Standard Savings Bank, A. S. Gardiner, Prest.; erect building at 9th St. and New York Ave.; safe-deposit vault to contain 5000 safe-deposit boxes; Pierson & Wilson, Archts., Washington Loan & Trust Bldg.

Fla., Lakeland.—D. O. Rogers; erect 5-story office building; elevators.

Md., Baltimore.—National Bank of Commerce, Eugene Levering, Prest.; purchased adjoining lot, 22x180x106x103 ft.; erect addition.

Md., Baltimore.—Chas. H. Steffey, Inc., Agt., 18 E. Lexington St.; remodel building at Commerce St. and Exchange Pl. for offices; 6 stories; fireproof; 2 high-speed elevators; Otto G. Simonson, Archt., Maryland Casualty Tower. Address Mr. Steffey.

Md., Baltimore.—Baltimore Commercial Bank, W. M. McCormick, Prest.; purchased site at Monument St. and Collington Ave.; 27x75 ft.; erect building for northeast branch; brick; slag roof; tile floors on concrete; hot-water heat; electric lighting; cement sidewalks; \$40,000; Jos. Evans Sperry, Archt., Calvert Bldg.

Md., Cumberland.—West Side Royalty Co.; erect 5-story office building; 106x100 ft.; Geo. F. Sansbury, Archt.

Md., Hagerstown.—Pangborn Corp.; erect 3-story addition to office building; 30x100 ft.

Md., Upper Marlboro.—Eastern Shore Trust Co., Cambridge, Md.; erect \$15,000 bank building previously noted; 28x45 ft.; 1 story and basement; brick; slate roof; wood, concrete and tile floors; vapor heat; B. Wesley Crawford, Supt. of Construction. (Address Robt. L. Harris, Archt., 703 Calvert Bldg., Baltimore, who is taking sub-bids on all work. (See Machinery Wanted—Building Material.)

Mo., Joplin.—Joplin Foundry Co.; erect 1-story office building; 50x50 ft.; brick and stone trim; composition roofing; furnace heating; electric lights; concrete floors; metal windows; reinforced concrete vault door; Smith, Rea & Lovitt, Archts., Frisco Bldg.

N. C., Mount Holly.—Central Bank & Trust Co., N. B. Kendrick, Prest.; erect building.

Okla., Okmulgee.—American State Bank; expend \$62,500 to remodel building; 44x100 ft.; brick; composition roof; tile floors; bids opened in 30 days; Smith, Rea & Lovitt, Architects, Kansas City, Mo. (Lately noted.)

Okla., Tulsa.—Dr. Walter E. Wright; reported to erect 8-story addition to Wright Bldg., W. 3d St.; \$500,000.

Okla., Tulsa.—H. F. Wilcox, New Wright Bldg.; reported to erect 5-story office building; \$250,000. (Lately noted under Stores.)

Okla., Tulsa.—Thompson Bros. & Hughes, 839 Kennedy Bldg.; erect 12-story-and-basement reinforced concrete office building; 86x140 ft.; reinforced concrete roof and floors; vacuum steam heat; \$700,000; bids opened about Aug. 1. Address Bass, Knowlton, Graham & Reynolds, Archts., 603-4 Kennedy Bldg. (Lately noted.)

S. C., Greer.—Planters' Savings Bank; erect \$48,000 building; 40x80 ft.; basement, main floor and mezzanine; fireproof; brick and stone; tar and gravel or asbestos roof; concrete floors; heating plant, \$2500; Beacham & LaGrand, Archts., Greenville; York Safe & Lock Co., York, Pa., Contr. for vaults, \$10,000.

Tex., Memphis.—First National Bank; erect building.

Va., Madison.—State Bank of Madison; erect \$15,000 building; 3 stories; 30x60 ft.; brick; H. Carl Messerschmidt, Archt., Mutual Bldg., Richmond.

Va., Petersburg.—Southern Aid Society of Virginia, B. L. Gordon, Secy., Richmond; erect \$30,000 office building; 3 stories; 30x32 ft.; brick, stone and terra-cotta; Hatton & Co., Archts., 12th and U Sts. N. E., Washington, D. C.

W. Va., Charleston.—Glenwood Bank; erect bank and office building, Charleston St. and Bigley Ave.

W. Va., Martinsburg.—Shenandoah Valley Bank & Trust Co.; erect \$60,000 bank, office and apartment building; 25x103 ft.; 4 stories; limestone front; brick walls; slag or tin roof; wood-joint floors on steel beams; vapor heat. Address C. L. Harding, Archt., 729 15th St. N. W., Washington, D. C. (Lately noted.)

W. Va., Beckley.—Raleigh County Bank; erect 6-story fireproof building; Richard M. Bates, Jr., Archt., Huntington.

W. Va., Huntington.—W. O. Walton; erect \$20,000 office building, 409 9th St.

Churches.

Ky., New Liberty.—Christian Church; erect building; Val P. Collins, Archt., 318 S. 4th St., Louisville, taking bids.

La., New Orleans.—Algiers Methodist Church, Rev. C. C. Weir, Pastor; erect \$50,000 building.

Md., Aquasco.—St. Paul's Parish, Dr. Crusoe; rector; erect \$15,000 church; 35x71 ft.; concrete; asbestos roof; wood floors; heating, \$1100. Address Delos H. Smith, Archt., Union Trust Bldg., Washington, D. C. (Lately noted.)

Miss., McComb.—St. Alphonsus Church; erect building. Address The Pastor.

Mo., St. Louis.—Winnebago Presbyterian Church, care J. Johnson, Winnebago and Tennessee Sts.; erect \$125,000 building; brick.

Mo., Springfield.—Grace Methodist Episcopal Church; erect \$125,000 building; reinforced concrete, steel and brick; reinforced concrete floors; concrete foundation. Address The Pastor.

N. C., Winston-Salem.—Waughtown Reformed Church; remodel building; \$10,000. Address The Pastor.

N. C., Wilmington.—Calvary Baptist Church, Rev. F. A. Sullivan, Pastor; erect \$20,000 addition; brick; 2 stories; auditorium and Sunday-school rooms, concert hall, etc.; install \$5000 organ; J. E. Allard, Chrmn. Bldg. Com. (Lately noted.)

N. C., Winston-Salem.—Burkhead and Liberty Methodist Churches; erect building. Address the Pastors.

N. C., Wilmington.—Grace Methodist Church; erect parsonage, Fourth and Grace Sts. Address The Pastor.

Okla., Hartshorne.—Methodist Episcopal Church; erect \$75,000 community building; 2 stories and basement; brick, stone and reinforced concrete; gravel roof; Hawk & Parr, Archts., Security Bldg., Oklahoma City.

Okla., Muskogee.—Bethany Presbyterian Church; erect \$60,000 building; 2 stories, basement and roof garden; 52x112 ft.; brick and Carthage stone; Barnes & McCoy, Archts.

Okla., Tulsa.—Church of Redeeming Love, 107 South Boston; erect mission; John Enon, superintendent construction.

Okla., Tulsa.—First Baptist Church; improve building, to include stuccoing, interior decoration, furnace, etc.; \$30,000. Address The Pastor.

S. C., Spartanburg.—First Baptist Church; erect Sunday-school building and parsonage, E. Main St. Address The Pastor.

Tenn., Memphis.—Temple Baptist Church; erect \$45,000 building, Cooper and Felix Sts.; brick. Address The Pastor.

Tex., Manor.—Methodist Church; erect \$12,000 building; 1 story; 45x65 ft.; frame and brick; R. L. Thomas, Archt., Littlefield Bldg., Austin.

Va., Richmond.—Stockton Street Baptist Church, Rev. Walter R. Leckliter, pastor; erect addition and alter church and Sunday-school; \$40,000; brick; Baskerville & Lambert, Archts., Travelers' Bldg.

W. Va., Fairmont.—Methodist Episcopal Church South; erect church and parsonage, Locust Ave. and Emerson St. Address The Pastor.

W. Va., Morgantown.—Presbyterian Church, Dr. C. H. Winkler, Chrmn. Building Committee; erect \$15,000 addition to church.

City and County.

Ga., Rome.—Jail.—Floyd County Comms. Roads and Revenues; bids until May 31; (1) wreck present jail and construct new one, including prison and cell work; (2) wreck old structure and erect new one ready for installation of prison work and cages; (3) prison and cell work; 2 stories; 41x74 ft.; brick and stone; tile roof; wood and concrete floors;

low-pressure steam heat; electric wiring; \$35,000; plans by Pauly Jall Building Co., St. Louis, at office Commrs. Address P. H. Vandiver, Chrmn. (Lately noted.)

Ky., Lexington—Auditorium.—City, Wood G. Dunlap, Commr.; voted \$500,000 bonds to erect building.

La., Baton Rouge—Band-stand, etc.—City Engr.; bids until May 12 to erect concrete band-stand, concrete pool, frame and stucco pergola, and frame and stucco comfort station.

S. C., Greenville—Library.—City; erect \$25,000 library; 25x75 ft.; 1 story and basement; fireproof; composition roof; cork tile or linoleum floors on concrete; hollow fireproof tile; ornamental terra-cotta; interior tile; ventilators; Beacham & LeGrand, Archts., Finlay Bldg. (Lately noted.)

W. Va., Charleston—City Hall.—City, Bonner Hill, Mgr.; erect city hall; Warne & Higginbotham, Archts. (Lately noted.)

Courthouses.

Mo., Lebanon.—Laclede County; votes in June on \$100,000 bonds to erect courthouse.

Okla., Fairview.—Major County Commrs.; erect \$250,000 courthouse; 4 stories and basement; 114x68 ft.; brick, stone and concrete; fireproof; composition roofing; W. E. Hulse & Co., Archt., Hoke Bldg., Hutchinson, Kans.

Okla., Frederick.—Tillman County Commrs.; erect \$250,000 courthouse; 4 stories and basement; brick, stone and reinforced concrete; Tonini & Bramlett, Archts., 301-2 Terminal Bldg., Oklahoma City. (Lately noted.)

Okla., Poteau.—Leflore County Commrs.; erect \$150,000 courthouse, Main St.; 3 stories; brick; concrete foundation; Tonini & Bramlett, Archt., 417 Terminal Bldg., Oklahoma City.

W. Va., St. Marys.—Pleasant County Court, R. L. Griffin, Clerk; reported to erect \$150,000 courthouse.

Dwellings.

Ark., Little Rock.—W. W. Brown; erect 2 bungalows, 400 and 336 Ridgeway; 1 story and basement; \$25,500.

Ark., Pine Bluff.—H. K. Toney; remodel 2 residences; \$10,000.

Ark., Pine Bluff.—H. C. Couch; erect \$20,000 residence; 2 stories.

D. C., Chevy Chase.—Stern & Tomlinson, Real Estate Trust Bldg., Washington, preparing plans for \$12,000 bungalow; 1 story and attic; 40x41 ft.; brick.

D. C., Washington.—D. J. Dunigan; erect residence, 3515 13th St. N. W.; also erect 15 residences, 4100 to 4128 3d St. N. W.; \$117,000.

D. C., Washington.—J. T. Medley, 1413 G St. N. W.; erect two 2-story residences; 36x24 ft.; frame; \$14,000.

D. C., Washington.—Mrs. Francis Pitney; repair building, 1747 Rhode Island Ave. N. W.; \$35,000.

D. C., Washington.—Chas. T. Taylor; erect \$10,000 residence, 3415 Lowell St.

Fla., Sebring.—Mrs. May B. Cooper; erect \$20,000 residence; G. R. Ragan, Archt., Terry Bldg., Roanoke, Va.

Fla., St. Petersburg.—David Lyle; erect \$10,000 residence, Fifteenth Ave. at Walnut St.

Ga., Americus.—Development Corp., H. L. Mize, Prest.; \$50,000 capital; erect number of 5, 6 and 7-room bungalows; frame; plaster board. (Lately noted.)

Ga., Plains.—M. M. Jennings; erect residence; 32x36 ft.; shingle or asphalt slate shingle roof; hardwood and pine floors; electric lights; interior tile; elevator; bids

opened May 20. Address S. R. Fetner, Archt., Box 275, Albany, Ga.

Ga., Valdosta.—W. B. Johnston, Atlanta; erect 8 bungalows.

Ky., Bowling Green.—Bowling Green Home Builders' Co., C. J. Burdell, Prest.; erect number of dwellings.

Ky., Lexington.—Gen. Wilbur R. Smith; erect residence, Mentelle Park and East Main St.

Ky., Louisville.—Henry Ruedeman; erect \$15,000 residence and garage; 2 stories and basement; 40x55 ft.; brick veneer; Nevin, Henry & Wischmeyer, Archts., 4th and Walnut Sts.

Ky., Russell.—G. A. Fowler; erect \$10,000 residence; 2 stories and basement; 32x36 ft.; brick veneer; Ralph Murray, Archt., Masonic Bldg., Ironton, O., taking bids until May 15.

La., Alexandria.—Dr. Leonard Mundis; erect \$15,000 residence and garage; 2 stories and basement; 42x38 ft.; brown shingle; C. W. Squires, Archt., 613 Exchange St., Emporia, Kan.

Md., Baltimore.—Walter J. Koch, 1429 E. Lafayette Ave.; erect 17 two-story residences, Towanda and Springhill Ave.; brick; \$50,000.

Md., Baltimore.—Acme Building Co., Equitable Bldg., erect 16 2-story dwellings, 2300 to 2330 Bryant St.; \$32,000.

Md., Baltimore.—H. Webster Cook, 3626 Greenmount Ave., Guilford; erect 17 two-story residences 1900 block E. 32d St.; brick; \$62,500.

Md., Baltimore.—Jno. H. Waller, Sun Office; erect \$15,000 residence, Guilford; 42x30 ft.; stucco on frame; slate roof; wood floors; low-pressure steam heat, \$1300; lighting, \$300; bids opened June 1. Address Roy G. Pratt, Archt., 1105 American Bldg.

Md., Frederick.—Merkeley Ward; erect \$10,000 residence; 2½ stories; brick; Ed Leber, Archt., 43 W. Market St., York, Pa.

Md., Gaithersburg.—Thos. B. Lippincott, 10 S. 18th St., Philadelphia, Pa.; preparing plans for \$20,000 residence; 3 stories; 30x42 ft.

Md., Salisbury.—Forum Corporation; erect 40 residences.

Mo., Joplin.—A. E. Abernathy; erect \$12,000 residence; 2 stories and basement; 28x30 ft.; brick-veneer and frame; Smith, Rea & Lovitt, Archts., Frisco Bldg.

Mo., Kansas City.—David Pinger; erect \$12,500 residence and garage; 1½ stories and basement; 30x35 ft.; stone and stucco; shingle roofing; C. E. Shepard, Archt., 510 Reliance Bldg.

Mo., Normandy Grove.—Victor Massa; erect \$20,000 residence and garage; 2 stories; 40x35 ft.; brick; John D. Paulus, Archt., 4729 Northland Ave., St. Louis.

Mo., St. Louis.—F. W. Vesper; erect \$10,000 residence; 2 stories; 45x30 ft.; stone, brick; Study & Farrar, Archts., Arcade Bldg.

Mo., St. Louis.—Dr. W. J. Burleigh, 4352 Delmar Ave.; erect \$15,000 residence, Hillcrest; 29x36 ft.; brick; slate roof; hardwood floors; hot-water heat; hollow fireproof tile; interior tile; bids opened about May 12; Edw. Lantz, Archt., 603 Post-Dispatch Bldg. Address M. C. Bartels, 4224 Bingham St. (Lately noted.)

Okla., Ada.—John L. Case; erect \$15,000 residence; 2 stories and basement; 54x36 ft.; brick veneer; shingle roof; Aurelius-Swanson Co., Archt., 1006 First Natl. Bank, Oklahoma City.

Okla., Edmond.—Aurelius-Swanson Co., Archt., 1006 First Natl. Bank, Oklahoma City; preparing plans for \$10,000 residence; 2 stories and basement; 33x45 ft.; frame; face brick; piers and columns; shingle roof.

Okla., Konawa.—Frank Swan; erect \$11,000 residence; 2 stories and basement; 33x57 ft.;

frame; shingle roof; Aurelius-Swanson Co., Archt., 1006 First Natl. Bank, Oklahoma City.

Okla., Oklahoma City.—Aurelius-Swanson Co., 1006 First Natl. Bank; erect 6 aeroplane bungalows; 34x60 ft. wide; 40x50 ft. long; brick and frame; piers and columns; shingle roof; \$48,000; also \$25,000 residence; 4 stories and basement; brick, stone and reinforced concrete; plans and construction by owner.

S. C., Charleston.—Standard Oil Co.; erect five 2-story dwellings; \$34,500; 26x38 ft.; 6 rooms, bath, laundry, porches, etc.; also considering other dwellings.

S. C., Greenville.—C. H. Speights; erect \$25,000 residence.

S. C., Spartanburg.—R. C. Hall; erect 12-room residence, North Church St.

Tex., San Antonio.—Mrs. Lottie O'Brien; erect 16-room residence, Bushnell Ave.; \$35,000.

Tex., Amarillo.—R. B. Masterson, Jr.; erect 2 residences; \$33,000.

Tex., El Paso.—C. P. Simpson; erect 2 bungalows; brick; \$10,000.

Tex., Houston.—Geo. F. Broun; erect \$4000 6-room cottage, W. Alabama St.; \$5000 6-room cottage, Sul Ross Ave.; 10-room brick-veneer \$7000 residence, 4202 Yoakum St.; \$4000 5-room cottages, Richmond Rd.

Tex., Marion.—C. A. Krueger; erect 1½-story residence and garage; hollow tile; reinforced concrete; Leo M. J. Dielmann, Archt., taking bids.

Tex., San Antonio.—Dr. Sorell; erect 7-room hollow-tile residence; Phelps & Dewees, Archts.

Tex., San Antonio.—Max Itz; erect 5-room residence; Phelps & Dewees, Archts.

Va., Harrisonburg.—C. L. Purr; erect \$12,000 residence; 2 stories and basement; 32x42 ft.; metal, lath and stucco; tar and gravel and tile roof; Aurelius-Swanson Co., Archt., 1006 First National Bank, Oklahoma City.

Va., Lynchburg.—Wister M. Heald; erect \$30,000 residence; 2 stories; hollow tile and stucco; Craighill & Cardwell, Archts., People's Bank Bldg.

Va., Mt. Jackson.—G. M. Shannon; erect \$20,000 residence; 2 stories; frame; G. R. Ragan, Archt., Terry Bldg., Roanoke.

Va., Newport News.—Stewart Lottier; improve and erect addition to residence; 2 stories; McKee, Williams & Pettibone, Archts.

Va., Portsmouth.—A. M. Hart, West Norfolk; erect \$10,000 residence; 30x30 ft.; 2 stories; frame; Modern Architecture Co., Archt., 222 High St., Portsmouth.

Va., Richmond.—Robert W. Wood; erect \$25,000 residence; 1½ stories; brick, stucco and terra-cotta; Lee & Lee, Archts., 918½ E. Main St.

Va., Richmond.—A. F. Hunt and R. J. Howlett, Asso. Archts., Old Dominion Trust Bldg.; preparing plans for \$25,000 brick residence.

Va., Roanoke.—S. A. Duerson; erect 5 residences, Raleigh Court; \$37,500.

Va., Schoolfield.—Riverside & Dan River Cotton Mills; reported to erect 70 dwellings for employes; \$250,000; 1 and 2 stories; frame and stucco; also \$50,000 school; 2 stories; 138x58 ft.; E. R. James, Archt., First National Bank Bldg., Danville.

Va., South Boston.—Mrs. Jos. Stebbins; erect \$10,000 residence; 2 stories; 45x50 ft.; brick; A. F. Hunt, Archt.; R. J. Howlett, Asso. Archt., both Old Dominion Trust Bldg., Richmond.

W. Va., Nuttallburg.—Stover Coal Co., Fisher Bldg., Chicago, Ill.; erect about 50 miners' dwellings and make other improvements at mine. (Lately noted.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Government and State.

Ala., Mt. Vernon—Home.—Alabama Home for Feeble-Minded; erect \$175,000 building; construction on unit plan.

D. C., Washington—Treasury Annex.—Treasury Dept., Jas. A. Wetmore, Acting Supvr. Archt.; bids until May 20 for mezzanine floor and metal shelving in sub-basement storeroom of Treasury Annex; copies of specifications and drawings No. SA-401 from office Supvr. Archt. (See Machinery Wanted—Metal Shelving.)

Ga., Atlanta—Public Rest Building.—City, J. N. Landers, Purchasing Agent, City Hall; bids until May 18 to erect 2-story and basement rest building; plans and specifications upon application to Mr. Landers.

Okla., Cordell—City Hall.—City; erect city hall and community building; \$40,000 bonds voted. Address The Mayor. (Lately noted.)

Va., Richmond—Library.—Virginia State Library Board, Edmund Pendleton, Chrmn.; erect \$40,000 fireproof annex to library; 2 stories; 40x50 ft.; brick, hollow tile and reinforced concrete; Baskerville & Lambert, Architects, Travelers' Bldg. (Lately noted.)

Hospitals, Sanitariums, Etc.

Ga., Atlanta.—Bureau of Yards and Docks, Navy Dept., Washington, D. C.; expend \$100,000 for alterations to hospital; 2 stories; frame; V. E. Perry, Engr., 8th and E Sts. N. W., Washington.

Ga., Brunswick.—City; rebuild city hospital; erect 18-room addition; electric elevator; election June 8 on \$50,000 bonds. Address The Mayor. (Lately noted.)

Mo., Fulton.—Calloway County Hospital; erect 2-story building; 65x131 ft.; brick and timber; reinforced concrete.

S. C., Greenwood.—Greenwood Hospital Association; erect \$25,000 addition; 36x75 ft.; brick veneer; metal shingle roof; concrete and pine floors; steam heat; electric lights; electric elevator; hollow fireproof tile; interior tile; Jas. C. Hemphill, Archt. (Lately noted.)

Tex., Fort Bliss.—Constructing Quartermaster, Fort Bliss; bids until May 31 to erect 400-bed hospital, including buildings, electric wiring, sewer system, plumbing, water supply, central heating plant, fire protection and concrete roads. (Lately noted.)

W. Va., Huntington.—State Board of Control, Jas. S. Lakin, member, Charleston; erect \$50,000 building for Huntington State Hospital, Dr. L. V. Guthrie, Supt.; semi-fireproof; 2 stories; Richard M. Bates, Archt., Huntington.

Hotels.

Ala., Jackson.—Judge Jno. S. Graham; convert 2 brick buildings into hotel; 25 rooms.

Ga., Atlanta.—Atlanta Real Estate Board appointed Forrest Adair, R. R. Otis and Benj. D. Watkins committee to promote erection of 1000-room hotel; \$2,000,000.

Ky., Hazard.—Christopher Davis; erect \$125,000 hotel; 4 stories and basement; 100 rooms; Thos. J. Nolan, Archt., Courier-Journal Bldg., Louisville, taking bids until May 15.

N. C., Charlotte.—Citizens' Hotel Co. incorporated; \$1,000,000 capital; erect hotel; Thaddeus A. Adams, Atty. (Lately noted.)

Okla., Okmulgee.—Creek Hotel Co.; erect \$750,000 hotel; 100x140 ft.; 8 stories; reinforced concrete; composition roof; concrete, marble, tile and hardwood floors; 3 passenger and 1 freight elevators; 2 lifts and 3 dumbwaiters; Stiles Construction Co., Contr. for foundation; balance of contracts let in about 3 weeks. Address Smith, Rea, Lovitt

& Senter, Archts., 303 Parkinson Bldg. (Previously noted.)

S. C., Camden.—Chamber of Commerce; promoting erection of \$100,000 hotel.

Tenn., Erwin.—Erwin Hotel Co., L. H. Phetteplace, Prest.; erect \$75,000 hotel; 3 stories; first unit of inn type; provision for enlargement; Clinton MacKenzie, Archt., 15 Broad St., New York.

Tenn., Tate.—Mineral Springs Hotel Co.; erect dining hall, 45x65 ft.; additions to 2 wings, 36x36 ft. each; bathhouse, 45x55 ft.; Manley & Young, Archts., Knoxville; construction by day labor.

Tex., Fort Worth.—J. F. Norris, 1201 Sixth Ave.; erect \$100,000 hotel, 3d and Throckmorton Sts.; 6 stories; reinforced concrete and brick; reinforced concrete floors; brick and concrete foundation.

Tex., Tyler.—Tyler Hotel Co.; erect \$100,000 building; 75x135 ft.; reinforced concrete; gravel roof; concrete floors; heating, \$10,000; Harry Overbeck, Archt., Dallas. (Lately noted.)

Va., Eastville.—Northampton Hotel Corp., C. W. Holland, Prest.; expend \$30,000 to alter buildings; Owens & Sisco, Archts., Continental Bldg., Baltimore, Md. (Lately noted.)

Miscellaneous.

D. C., Washington.—Clubhouse.—Metropolitan Club, Woodbury Blair, Prest., 17th and M Sts. N. W.; erect 5-story addition; brick and stone; fireproof; F. H. Brooke, Archt., 1218 Connecticut Ave. N. W. (Lately noted.)

La., New Orleans.—Clubhouse.—Chess, Checkers and Whist Club; expend \$100,000 to remodel Cosmopolitan Hotel for clubhouse; Rathbone De Buys, Archt. (Lately noted.)

La., New Orleans.—Barn.—Wells-Fargo Express Co.; erect 1-story addition to barn; 100 stalls.

Mo., St. Louis.—Gymnasium and Industrial Building.—Good Wills Industries, Rev. Thos. E. Green; erect \$150,000 building; 4 stories; 43x101 ft.; brick; reinforced concrete; Hohenschild & Pearce, Archts., Odd Fellows' Bldg.

Mo., Kansas City.—Restaurant.—Li Tung; expend \$15,000 to remodel restaurant; 2 stories and basement; E. P. Madorie, Archt., Republic Bldg.

Mo., Kansas City.—Clubhouse.—University Club; erect clubhouse; 4 stories and basement; brick, terra-cotta and reinforced concrete; fireproof; composition roof; steam heat; yellow-pine floors; marble and tile work; McKenzie & Trask, Archts., Gloyd Bldg.

S. C., Florence.—Fair.—Pee Dee Fair Assn.; expend \$25,000 for improvements.

Tenn., Jackson.—Fair.—West Tennessee Divisional Fair Assn., W. F. Barry, Secy.; erect agricultural exhibit hall, 40x200 ft.; merchants' exhibit building, 40x200 ft.; poultry building, 40x100 ft.; cattle barn, 40x200 ft.; 100 swine pens; addition to amphitheater; \$20,000. (Lately noted.)

Tenn., Memphis.—Undertaking.—J. T. Hinton & Son; expend \$50,000 to remodel building and erect addition for undertaking establishment; provide chapel; install organ, etc.

Tex., Paris.—Auditorium and Exhibit.—Lamar County Fair Assn.; erect 1-story concrete and brick auditorium; also several concrete buildings; reinforced concrete flooring; concrete foundations; \$100,000.

Va., Lynchburg.—Clubhouse.—Fort Hill Club, Mrs. L. W. Walsh, Prest.; erect museum and clubhouse; Craighill & Cardwell, Archts., People's National Bank Bldg.

Va., Richmond.—Clubhouse.—Lakeside Country Club, A. L. Straus, Chrmn. Building Com.;

expend \$22,000 to alter building; frame; H. T. Barnham, Archt., Chamber of Commerce Bldg.

Railway Stations, Sheds, Etc.

La., New Orleans.—American Railway Express Co.; erect 2-story terminal building; 50,000 sq. ft. floor space; \$50,000 to \$75,000.

Va., Gate City.—Southern R. R., B. Herman, Ch. Engr. M. W. and S., Lines East, Charlottesville, N. C.; erect depot.

Schools.

Ark., Conway.—Central Baptist College, Dr. D. S. Campbell, Prest.; erect \$120,000 dormitory; 45x200 ft.; 64 rooms; fireproof; concrete and brick; tile roof; steam heat; 1-ton electric elevator \$1000; bids opened June 1; Wittenberg & Deloney, Archts., Little Rock. Address Dr. Campbell. (Lately noted.)

D. C., Washington.—District of Columbia, Oliver P. Newman; erect \$75,000 Phelps School addition; 2 stories and basement; brick, steel and stone; Snowden Ashford, Archt., District Bldg.

Fla., DeLand.—School Dist. Trustees; considering election on \$30,000 school bonds.

Ga., Soperton.—City, Will Stallings, Mayor; votes June 2 on \$20,000 bonds for water-works and school. (Lately noted.)

Ga., Waynesboro.—Waynesboro School Dist., W. C. McCarver, Chrmn.; erect \$30,000 school; brick.

Ky., Lexington.—Sigma Chi Fraternity, University of Kentucky; erect \$30,000 fraternity house.

Ky., Frankfort.—Kentucky Normal & Industrial Institute, G. P. Russell, Prest.; erect \$30,000 dormitory; 3 stories and basement; 34x70 ft.; brick; tin roof; hardwood floors; Leo. L. Oberwarth, Archt., 210 E. Main St., receives bids until May 17. (Lately noted.)

Ky., New Liberty.—Board of Education, Dr. Geo. Purdy, Chrmn.; erect \$15,000 high and grade school; 1 story and basement; 60x100 ft.; brick and concrete; Val P. Collins, Archt., 312 S. 4th St., Louisville.

Ky., Bowling Green.—Western Kentucky State Normal School; erect \$250,000 dormitory; D. N. Murphy & Bro., Archts., Louisville.

Md., Baltimore.—Board of Awards, Howard Bryan, Acting Prest.; bids until May 26 to erect School No. 65, Poplar Grove St. near Lanvale St.; plans and specifications at office C. H. Osborne, Inspector of Buildings.

Md., Baltimore.—Maryland Industrial & Training School for Girls, Carey and Baker Sts.; considering erecting several cottages at Montrose, near Reisterstown; Smith & May, Archts., Calvert Bldg.

Md., Salisbury.—Wicomico County defeated \$200,000 bond issue for schools; J. M. Bennett, Secy. Board of Education. (Lately noted.)

Miss., Gulfport.—Board of Education; erect school and repair present structures; vote May 15 on \$60,000 bonds. (Lately noted.)

Miss., Independence.—Independence Consolidated School Dist.; voted \$12,000 bonds to erect annex; heating plant, etc. Address Elmer H. Jones. (Lately noted.)

Miss., Moorhead.—Sunflower County School Board, Indianola, Miss.; erect dormitory at Agricultural High School; \$75,000 bonds voted.

Mo., Boonville.—Boonville School Dist.; voted \$40,000 bonds; erect boiler-house, install boiler, erect gymnasium, etc.; slate roof; J. H. Felt & Co., Archts., Grand Ave. Temple, Kansas City; Dr. Wm. Mittelbach, Secy.

Mo., Sedalia.—School Board; repair and erect additions to schools; election May 18 on \$75,000 bonds.

Mo., Carthage.—Board of Education, Nora Johnson, Secy.; erect 4-room additions to Mark Twain and Eugene Field schools; 1 story and basement; brick; stone trim; composition roof; \$28,000 each; J. H. Felt & Co., Archts., Grand Avenue Temple Bldg., Kansas City. (Lately noted.)

Mo., Grand Pass.—Board of Education, W. B. Houston, Secy.; erect \$20,000 school; 1 story and basement; 36x118 ft.; brick; stone trim; composition roof; Owen & Payson, Architects, Reliance Bldg., Kansas City.

Mo., Kansas City.—Board of Education, J. B. Jackson, Secy.; erect gymnasium, 15th and Forest Aves.; 1½ stories; 60x115 ft.; brick; stone trim; composition roof; steam heat; electric lights; yellow-pine floors; 2-story and basement addition to Faxon school; brick and reinforced concrete; fireproof; stone trim; composition roof; steam heat; electric lights; yellow-pine floors; 2-story and basement addition to Benton school; brick; reinforced concrete; stone trim; composition roof; oak floors; steam heat; electric lights; C. A. Smith, Archt., Finance Bldg.

Mo., Slater. — Board of Education; bids opened May 10 to erect \$70,000 high school; 2 stories and basement; 45x120 ft.; brick; stone trim; composition roof; J. H. Felt & Co., Archts., Grand Ave. Temple Bldg., Kansas City, Mo. (Lately noted.)

Mo., Webster Groves.—Board of Education, S. T. Honig, Prest.; erect \$90,000 addition to Bristol school; expend \$60,000 to remodel Avery school; both structures brick; fireproof; bids about May 15; W. B. Ittner, Archt., Board of Education Bldg., St. Louis. (Lately noted.)

N. C., Asheville.—Weaver College; erect several buildings; \$100,000 to \$200,000.

N. C., Davidson. — City, Jas. Lee Sloan, Mayor; plans to erect schools; considering bond issue.

N. C., Murfreesboro.—Board of Education, J. K. Parker, Secy.; erect 2-story brick high school; bids opened May 14; plans and specifications at office Mr. Parker; obtainable at office Wm. Newton Diehl, Archt., Virginia-Carolina Bldg., Norfolk, Va.

N. C., New Bern.—City voted \$150,000 to erect schools. Address The Mayor.

N. C., Winston-Salem.—County Board of Education, R. H. Latham, Supt.; erect \$15,000 building for Sedge Garden, Cool Springs and Glenwood Consolidated Dist.; 1 story; fireproof.

Okla., Calumet.—Board of Education; erect \$30,000 school; 1 story and basement; 60x50 ft.; brick and stone; Tonini & Bramblett, Archts., Terminal Bldg., Oklahoma City.

Okla., Cement.—Board of Education; erect \$30,000 school; 1 story and basement; 60x50 ft.; brick and stone; Tonini & Bramblett, Archts., Terminal Bldg., Oklahoma City.

Okla., Crowder.—Board of Education; erect \$28,000 school; 1 story and basement; 70x50 ft.; brick; stone trim; tar and gravel roof; M. T. Hardin, Archt., Muskogee, Okla.

Okla., Kingfisher.—School Directors, Consolidated Dist. No. 4; erect school; R. W. Shaw, Archt., Beck Bldg., Enid, Okla.

Okla., Lindsay. — Trustees of Consolidated School Dist. No. 1; erect building; \$30,000 bonds voted.

Okla., Mangum.—Board of Education; erect \$130,000 high school building, auditorium and gymnasium; 128x130 ft.; reinforced concrete; probably tile roof; maple and concrete floors; steam heat; city lights; bids opened May 3. Address Wallace Emerson, Supt. of City Schools. (Lately noted.)

Okla., McAlester.—E. E. Anderson; erect 4-

story school and dormitory for McAlester Business College; \$100,000.

Okla., Muskogee.—Board of Education; expend \$250,000 for schools and additions; brick; built-up roof; pine floors; bonds voted. (Lately noted.)

Okla., Muskogee.—Board of Education; erect schools; \$250,000 bonds voted.

Okla., Newcastle. — Board of Education; erect building; considering bond election.

Okla., Picher.—Board of Education; erect \$75,000 high school; 2 stories and basement; brick, stone and reinforced concrete; Tonini & Bramblett, Archts., Terminal Bldg., Oklahoma City.

Okla., Ponca City.—School Board; erect several 3 and 4-room bungalows for school; \$18,000 each.

Okla., Tahlequah.—Department of Interior, Office of Indian Affairs, Washington, D. C.; bids until June 7 to erect brick dormitory at Cherokee Orphan Training School; plans and specifications at office United States Indian Warehouse, Chicago, St. Louis, San Francisco and office Supt. of Cherokee Orphan Training School.

S. C., Aynor.—Horry Industrial School, Rev. S. C. Morris, Prest., Horry, S. C.; erect \$75,000 building.

S. C., Branchville.—Board of Education, P. C. Dukes, Secy.; enlarge school building; 40x50 ft.; brick; tin roof; wood floors; steam heat; bids opened about June 1; \$20,000 voted. (Lately noted.)

S. C., Charleston. — Board of Education; opened bids to erect grade school, Calhoun St.; T. W. Worthy, lowest bidder; D. B. Hyer, Archt.

S. C., Charleston.—Medical College; erect building; D. B. Hyer, Archt.

Tex., Denton.—College of Industrial Arts, F. M. Bailey, Prest.; erect \$150,000 auditorium and music hall.

Tex., Tehuacana. — School Board; erect building; vote in May on \$25,000 bonds.

Va., Blackstone. — Belfonte Dist. School Board; erect \$65,000 high school; 92x106 ft.; brick, cement, stone and wood; Barrett specification roof; concrete and maple floors; split system of heat; metal ceiling; wire glass; ventilators; steel sash; bids opened May 15. Address G. R. Ragan, Archt., Terry Bldg., Roanoke. (Lately noted.)

Va., Blackstone.—Blackstone Female Institute; rebuild main dormitory noted burned at loss of \$100,000.

Va., Dunganon.—School Board, W. D. Smith, County Supt., Gate City, Va.; erect \$50,000 high and grade school; 12 rooms and auditorium; 2 stories and basement; 140x137 ft.; brick; H. Doriot, Archt., Spurgeon Bldg., Bristol.

Va., Elizabeth.—Wythe Dist. School Board, R. F. D. Hampton; considering \$200,000 school building; Chas. M. Robinson, Archt., Times-Dispatch Bldg., Richmond.

Va., Leesburg.—Board of Education; erect \$30,000 school; 6 rooms; G. R. Ragan, Archt., Terry Bldg., Roanoke.

Va., Richmond.—Church of Sacred Heart, Rev. D. J. O'Connell, Pastor; erect \$150,000 parochial school; 90x143 ft.; Carneal & Johnston, Archts., Chamber of Commerce Bldg.; All Port Construction Co., Contr. (Lately noted.)

Va., Rodman Heights. — Norfolk County School Board, Jos. Hurst, Supt., 140 Granby St., Norfolk; erect \$30,000 addition to school; brick; 2 stories; Chas. M. Robinson, Archt., Times-Dispatch Bldg., Richmond.

Va., Vinton. — Board of Education; erect annex to school; 6 rooms and auditorium;

\$35,000; G. R. Ragan, Archt., Terry Bldg., Roanoke.

W. Va., Clarksburg.—Board of Education, J. N. Hess, Secy., School Dist.; bids until May 18 to erect addition to Kelly-Miller School; drawings and specifications at office Board of Education, Empire Bldg., and office Holmboe & Pogue, Archts.

W. Va., Flemington.—Flemington School Dist., J. B. Frum, Prest.; votes May 22 on \$40,000 bonds to erect high and grade school. (Lately noted.)

W. Va., Morgantown.—Grant Dist. Board of Education, F. M. Lynch, Prest.; erect \$30,000 high school; brick veneer; 4 rooms and basement; election May 25 on proposition.

W. Va., Romney.—State Board of Control, Charleston; rejected bid to erect dormitory at West Virginia School for Deaf and Blind; 2 stories and basement; 160x48 ft.; brick; composition roof; tile corridors; wood joists, metal stud and lath partitions; wood fiber plastering; H. Rus Warne, Archt.; Jas. S. Lakin, in charge of construction; both Charleston. (Lately noted.)

Stores.

Ark., Batesville.—Barnett Bros. Mercantile Co.; erect concrete and stone building; 40 ft. square; install heating plant; also considering warehouse; 200 ft. long. (Lately noted.)

D. C., Washington.—Ruth S. Olinger; erect \$25,000 store, 1540 U St. N. W.

D. C., Washington.—M. Brooks & Co.; erect \$125,000 store building; 5 stories and basement; 40x110 ft.; brick; fireproof; A. P. Clark, Jr., Archt., 816 14th St.

D. C., Washington.—Grant Leet, 725 14th St. N. W.; alter and erect addition to building, 14th St. and Massachusetts Ave. N. W., for stores and dwelling; \$30,000; brick; 4 stories; 50x100 ft.; Milburn-Heister Co., Archt., 710 14th St. N. W.

D. C., Washington.—J. Wenig, 721 10th St. N. W.; preparing plans for alterations to store and apartment building, Pennsylvania Ave. N. W.; 4 stories; brick; \$10,000.

Fla., Miami.—Burdine Sons Co.; erect business block, Avenue D; steel and concrete; 2 stories; provision for 3 more; 250x120 ft.; \$250,000.

Ga., Atlanta.—John C. Lusk Co., 512 Candler Bldg.; erect addition to building 303-5 Peachtree St.

Md., Baltimore. — Jas. Carey, Jr.; remodel building Franklin and Howard Sts. for store and business purposes; Wm. W. Emmart, Archt., 1101 Union Trust Bldg.; contractors estimating; G. Walter Tovell, Eutaw and McCulloh Sts.; Jno. Hiltz & Sons, 2 E. Redwood St.; Chas. L. Stockhausen Co., Gay and Water Sts.; Hicks, Tase & Norris, 106 W. Madison St.; Price Construction Co., 210 Maryland Trust Bldg.; Willard E. Harn Co., 2314 Oak St.; Cogswell-Koether Co., 406 Park Ave.

Md., Baltimore.—Frank Steele, 118 W. Baltimore St.; erect store and apartment building, Reisterstown Road; 26x65 ft.; 2 stories; frame; stone, foundation; slag roof; wood joists; \$12,000; bids opened; Jno. Freund, Archt., 1307 St. Paul St. Address Owner.

Mo., Boonville.—J. M. Wilkerson; erect 2-story and basement building; 70x84 ft.; brick; first floor, storerooms; upper floor, offices.

Mo., Kansas City. — Schutte Lumber Co.; erect business building; 1 story and basement; 50x110 ft.; brick and reinforced concrete; stone trim; composition roof; A. H. Buckley, Archt., Gloyd Bldg.

Mo., St. Louis.—Delhi Battery & Supply Co.; erect \$100,000 mercantile building; 2 stories; 80x135 ft.; brick; fireproof; P. J. Bradshaw, Archt., International Life Bldg.

Mo., St. Louis.—Dr. T. M. Sayman; erect \$75,000 store and apartment; 2 stories; 50x150 ft.; brick; semi-fireproof; Wedemeyer & Nelson, Archts., Wainwright Bldg.

Mo., St. Louis.—Luke E. Hart; erect \$75,000 mercantile building; 1 story; 50x130 ft.; brick; P. J. Bradshaw, Archt., International Life Bldg.

N. C., Winston-Salem.—Poindexter-Montague-White Co.; erect several business buildings, Second and Chestnut Sts.

Okl., Chickasha.—E. M. O'Brien; erect building; 25x100 ft.; stone.

Okl., Tulsa.—J. A. Haver; expend \$10,000 to remodel building 409 S. Main St.

S. C., Charleston.—W. T. Grant Co.; remodel store buildings King St.; D. B. Hyer, Archt.

S. C., Westminster.—W. E. Cheswell; erect 3 store buildings; 2 stories; second floors, offices.

Tex., Laredo.—J. M. Ramos; erect \$65,000 store; 2 stories and basement; 50x109 ft.; C. H. Page & Bro., Austin Natl. Bank Bldg., Austin.

Va., Danville.—E. H. Miller; erect \$60,000 building; 2 stories; 25x148 ft.; brick; Heard & Chesterman, Archts., Arcade Bldg. (Lately noted.)

Va., Roanoke.—H. C. Barnes; erect \$25,000 drug store and office building; 4 stories; brick; G. R. Ragan, Archt., Terry Bldg.

Va., Roanoke.—H. C. Barnes; expend \$50,000 to remodel 6 storerooms; G. R. Ragan, Archt., Terry Bldg.

W. Va., Huntington.—Wild & Boette; erect \$30,000 store and office building; 3 stories; brick; Meanor & Handloser, Archts. (Lately noted.)

Theaters.

Ark., Eldorado.—L. B. Clark, Mgr.; interested in erection \$75,000 moving-picture theater; auditorium to seat 750; 20-ft. stage.

Ky., Louisville.—Majestic Theater Co., 544 S. 4th St.; erect \$200,000 building.

La., Monroe.—Lillian Meyers and others; erect \$100,000 theater; 60x120 ft.; red mat brick; stone trim; balcony, restrooms, etc.; Wm. Drago and L. Milton King, Archts. (Lately noted.)

Md., Baltimore.—Capital Theater Co., J. Louis Rome, Secy., Equitable Bldg.; erect \$250,000 theater, 1518-32 W. Baltimore St.; 125x100 ft.; brick and stucco; slag roof; electric lights; seating capacity 1500; dance hall over theater; stores, billiard-rooms, bowling alleys, etc.; Wyatt & Nolting, Archts., Keyser Bldg.

Tex., Austin.—Maj. Geo. W. Littlefield; erect \$73,000 picture theater; 45x160 ft.; concrete and frame; built-up roof; cement, wood and tile floors; heat and ventilation \$4000; city lights; metal ceilings; interior tile; wire glass; bids opened about May 25; Walsh & Giesecke, Archts., 408 Littlefield Bldg. (Lately noted.)

Tex., Houston.—Paul Baraco; erect moving-picture theater Odin Ave.; 1 story; brick and tile; stores and offices.

Va., Richmond.—S. P. Williams; erect \$35,000 theater, store and office building, 406 N. 2d St.; 2 stories; 29x100 ft.; brick; C. T. Russell, Archt.

Va., Saltville.—Saltville Amusement Co., A. H. Finks and others; erect \$40,000 moving-picture theater; concrete and brick; 79x94 ft.; 4-way bowling alley.

Warehouses.

Ark., Fort Smith.—O. K. Storage & Transfer Co.; erect warehouse S. 9th St. near Rogers Ave.; fireproof.

D. C., Washington.—R. P. Andrews Paper Co.; erect warehouse; fireproof; 3 stories; sprinkler system; elevator; heating, etc.; Milburn-Heister Co., Archt., 710 14th St. N. W.; bids opened May 8.

Fla., Lakeland.—E. H. Youngs, Jr.; erect 2-story brick warehouse and storage building; 94x120 ft.; \$25,000; also addition to warehouse occupied by Gibson-Plott Co.; \$5000.

Ky., Lexington.—Smith-Haggard Lumber Co.; erect \$6000 warehouse, \$3000 office building and \$1000 garage.

La., New Orleans.—Cumberland Telephone Co., C. A. Stair, Gen. Mgr.; erect \$60,000 warehouse; tile, brick and concrete; 1 story; 20,000 sq. ft.

Miss., Jackson.—H. B. Jenkins, Prop., Star Steam Laundry; plans erection business building; also addition to laundry.

Md., Baltimore.—Canton Co., Walter B. Brooks, Pres., Commerce and Water Sts.; erect \$110,000 warehouse on 5th Ave.; 3 stories; 80x144 ft.; reinforced concrete; built on wood piles; foundation for 6 stories; Sanford & Brooks, Engrs., Commerce and Water Sts.; construction by owner. (Lately noted.)

BUILDING CONTRACTS AWARDED

Apartment-Houses.

Mo., Kansas City.—McCanles Realty Co., 314 Bonills Bldg.; erect \$50,000 apartment-house; 3 stories and basement; 24 apartments; 36x118 ft.; Rowland Bros., Contr. for masonry; plans by owner.

Mo., Kansas City.—C. M. Roscoe; erect 1-story addition to 2-story building; 40x60 ft.; \$10,000; C. B. Vrooman, Contr., 23 E. 9th St.; plans by owner.

N. C., Greensboro.—Hyman Bros.; erect \$37,000 apartment-house, 800 block Walker Ave.; 3 stories; brick; J. M. Holliday, Contr.

Tex., Lufkin.—Mrs. J. R. McMullen; erect \$10,000 apartment-house; 2 stories; hollow tile; 12 rooms; 4 apartments; C. W. Severance Construction Co., Contr. (Previously noted.)

Tex., San Antonio.—R. A. Thiele; erect brick and frame apartment-house; \$13,000; Beverly Spillman, Archt.; V. L. Rasmussen, Contr.

Va., Richmond.—Miss M. M. Kratz, 2712 Hanover Ave.; erect \$70,000 apartment-house; 60x90 ft.; 3 stories; Carl M. Lindner, Archt.; Chas. M. Phillips & Co., Contrs., both American Natl. Bank Bldg.

W. Va., Charleston.—C. V. Ramzie, 702 Kanawha St.; erect \$15,000 store and apartment building; 40x70 ft.; J. A. Cohen, Contr.

Association and Fraternal.

Okl., Walters.—Masonic Lodge; erect \$40,000 temple; 2 stories; 50x90 ft.; A. M. Thompson & Son, Contrs.; plans by owner.

Bank and Office.

Ky., Somerset.—Citizens' National Bank; remodel building; 3 stories; \$10,000; R. M. Bates, Archt., 1118 First National Bank Bldg., Huntington, W. Va.; Geo. L. Elliott, Contr., Somerset.

Tex., Caldwell.—First State Bank, H. Hudson, Pres.; erect \$20,000 building; 1 story; 20x80 ft.; A. W. Fowlkes, Contr.

Tex., Lufkin.—Lufkin National Bank, Roy Kurth, Cash.; erect \$52,500 building; 3 stories; brick; 50x120 ft.; tile floor; steam heat; electric lights; elevator; Jones & Tabor, Archts., Binz Bldg., Houston; C. W. Severance Construction Co., Contr., Lufkin. (Lately noted.)

Tex., El Paso.—First Mortgage Co.; erect \$400,000 office building; 15 stories; fireproof

N. C., Charlotte.—J. H. Cutter & Co.; erect cotton warehouse; 2 and 3 stories; 10 compartments 50x132 ft.; 165,000 sq. ft. space; storage capacity 22,000 bales; slow-burning construction; electric trucks; fire equipment; J. E. Shirrine, Archt.-Engr., Greenville, S. C. (Lately noted.)

S. C., Greenville.—Blue Ridge Lumber Co., C. H. Talley, Mgr.; erect 26x120-ft. warehouse; 2 sheds, 18x100 ft. each; \$12,000.

S. C., Simpsonville.—Dr. L. L. Richardson; promoting erection of cotton warehouse.

Tenn., Knoxville.—Frank E. Fowler; erect \$45,000 warehouse.

Tenn., Morristown.—Planters' Tobacco Warehouse Co.; erect \$50,000 warehouse; 175x300 ft.; steel frame; concrete foundation; composition roof; maple floors; contract let May 15; Manley & Young, Archts., Knoxville.

Tex., Dallas.—Magnolia Petroleum Co.; erect 2-story brick warehouse; 40x50 ft.; \$16,000; also 3 filling stations, \$10,000 each.

Va., Richmond.—Hallett & Pratt, Mutual Bldg.; preparing plans for \$50,000 tobacco warehouse; 4 stories; reinforced concrete.

stair shaft; steel and concrete; brick and terra-cotta exterior; 54x120 ft.; also remodel First Natl. Bank Bldg.; Banglebaugh & Whitson, Archts.; J. C. Buchanan, Contr. (Lately noted.)

Va., Lawrenceville.—First National Bank; erect \$30,000 building; 36x100 ft.; 3 stories; brick; slag roof; rift pine, tile and marble floors; steam heat; electric lights; H. T. Barnham, Archt., Chamber of Commerce Bldg., Richmond; E. W. Ligon, Contr., Lawrenceville. (Lately noted.)

Va., Norfolk.—Citizens' Bank; erect 1-story addition to 7-story office building; \$80,000; 50x150 ft.; steel and brick; gravel roof; wood floors; rolling partitions; Ferguson & Peebles, Archts.; W. M. Minter & Co., Contrs. (Lately noted.)

Churches.

Ark., Pine Bluff.—First Methodist Church; erect \$200,000 building; 80x150 ft.; stone and brick; slate roof; tile floors; Thompson & Co., Archts.; F. Jones, Contr. Address Rev. Mr. Steel, Pastor.

Ga., Savannah.—Church of Blessed Sacrament; erect building; 40x80 ft.; seating capacity 360; W. T. Hussey, Contr.; Savannah Stone Co., Contr., stone; Jno. Gleason, Chrmn. Building Com. (Lately noted.)

La., Thibodaux.—Catholic Church, Rev. A. M. Barbier, Pastor; erect \$200,000 building; 176x93 ft.; pressed brick and cast stone; red Spanish tile roof; concrete, wood and tile floors; plaster board; safes; vaults; ventilators; Burton R. Bendernagel, Archt., 620 Audubon Bldg., New Orleans; J. A. Robichaux, Contr., Thibodaux. (Lately noted.)

Mo., Junction City.—First Presbyterian Church; erect \$100,000 building; 2 stories and basement; 90x104 ft.; Shepard & Wiser, Archts., 302 Long Bldg., Kansas City, Mo.; Clarence Johnson, Contr., Manhattan, Kan.

Tex., Shiner.—Baptist Church; erect building; contract let. Address The Pastor.

Dwellings.

D. C., Washington.—W. Jett Lauck; expend \$20,000 to alter residence; 2½ stories; Ward Brown, Archt., 224 17th St.; C. A. Langley, Contr., 310 12th St.

Fla., Jacksonville.—G. W. Brow, E. Bay St.; erect \$9000 residence and \$1000 garage; for-

mer 26x52 ft.; latter 18x20 ft.; stucco on frame; tile roof; wood floors; hot air, \$500; city lights; Henry Taylor & Son, Archts. and Contrs., 5 Main St.

Ga., Albany.—Jno. F. Burke; erect residence; 55x50.6 ft.; frame; asphalt slate or shingle roof; hardwood and tile floors; steam heat, \$100; interior tile; S. R. Fetner, Archt., Box 275; J. C. Hird, Contr.

Ga., Savannah.—Fred Cockrell; erect \$50,000 residence, Estill Ave. and Harmon St.; brick veneer; Henrik Wallin, Archt.; R. J. Whalley, Contr.

La., New Orleans.—Geo. Montgomery, Prest. of Napoleon Realty Co.; erect 25 bungalows; \$137,500; R. T. Hancock, Contr., Chicago.

Md., Baltimore.—Harold C. Hann, Gaither Bldg.; erect 18 dwellings, University Parkway, between Stony Run and Roland Ave.; \$25,000 to \$30,000 each; 40x25 ft.; 10 rooms; 2 baths; colonial and old English style; Edw. L. Palmer, Jr., Archt., 513 N. Charles St.; Piel Construction Co., Contr., Edmondson and Whitmore Aves.

Md., Hagerstown.—Newton Gish, 905 Potomac St.; erect \$12,000 double residence; 2½ stories; 36x42 ft.; F. C. Schleigh, Contr., 501 S. Cannon Ave.

Md., Hagerstown.—H. E. Hargot; erect \$15,000 double dwelling; 2½ stories; A. J. Klinkhart, Archt., 54 Washington St.; Clinton Trovinger, Contr., 903 Potomac St.

Mo., St. Louis.—A. Meyer, Central Natl. Bank Bldg.; erect \$14,000 residence; 2 stories; 27x37 ft.; D. H. Dandan, 4108 College Ave., Contr. for masonry; plans by owner.

Okla., Oklahoma City.—Mager & Mager, 205 Colcord Bldg.; erect \$12,000 residence; 2 stories and basement; B. McCormick, Contr., 1026 N. Dewey; plans by owner.

S. C., Rock Hill.—Arcade Cotton Mills, Alexander Long, Prest.; erect 70 residences; 4 to 6 rooms; Fiske-Carter Construction Co., Contr., Greenville, S. C.

Tex., Lufkin.—D. H. Adams; erect \$30,000 residence; 2 stories; stucco and concrete; I. W. Baker, Contr.

Tex., San Antonio.—L. S. Cristol; erect \$13,000 residence; colonial type; frame; hot-water heat; Malcom G. Simons, Archt.

Tex., San Antonio.—N. J. Craighead; erect 6-room frame bungalow; sleeping porch; David A. Lown, Archt.; H. Otto Brown, Contr.

Va., Bedford.—J. T. Clark; erect \$23,763 dwelling; 2½ stories; 68x36 ft.; Craighill & Cardwell, Archts.; W. K. Barger, Contr.; both People's Bank Bldg., Lynchburg.

Va., Danville.—Mrs. B. L. Wells; erect \$12,000 residence; 2 stories; 57x41 ft.; Cooper Lal, Archt., Law Bldg.; D. P. Bass, Contr.

Va., Danville.—B. Kyle Jones; erect \$10,000 residence; 1 story; 40x60 ft.; Heard & Chesterman, Archts., Arcade Bldg.; Barker & Cole, Contrs.

W. Va., Huntington.—J. R. McMahon; erect \$25,000 residence; 2 stories; 32x46 ft.; Wm. Francis Diehl, Archt., R. & P. Bldg.; C. W. Harer, Contr., 426 5th St.

Government and State.

Fla., Gainesville.—Home.—Florida State Farm Colony for Epileptic and Feeble-minded, Dr. Lorin A. Green, Supt., Aragon Hotel, Jacksonville; erect \$75,000 administration building and dormitory of 4 wings; tile and stucco; terra-cotta trim; tile roof; \$60,000; T. M. Bryan, Archt., Gainesville; O. P. Woodcock, Contr., Jacksonville. (Lately noted.)

Hospitals, Sanitariums, Etc.

Okla., Clinton.—State Board of Public Affairs; erect \$75,000 tuberculosis sanitarium; brick; reinforced concrete and steel; reinforced concrete floors; concrete foundation; C. H. Crissman & Santee, Contrs.

Va., Harrisonburg.—Rockingham Memorial Hospital; erect \$45,000 addition; brick and frame; slate and slag roof; concrete and maple floors; steam heat; electric lights; hollow fireproof tile; ventilators; C. M. Robinson, Archt., Richmond; W. M. Bucher & Son, Contrs., Harrisonburg. (Lately noted.)

Hotels.

N. C., Southern Pines.—Southland Hotel Co.; erect \$21,000 addition; 36x80 and 36x50 ft.; frame; composition roof; pine floors; steam heat; plaster board; Norman Kline, Contr., Carthage, N. C. (Lately noted.)

Miscellaneous.

D. C., Washington.—Home.—Jewish Foster Home; erect \$10,000 addition; 2 stories; 22x42 ft.; O. Vogt, Archt., Home Life Bldg.; Jas. L. Parsons, Jr., Contr., Southern Bldg.

Tex., Waco.—Orphanage.—Methodist Orphanage, W. F. Barnett, Supt.; erect \$34,480 power-house and laundry; 68x34 ft.; 2 stories; brick and cement; Barrett and cement roof; cement floors; hydraulic elevator; Milton W. Scott, Archt., 412½ Franklin St. Address L. C. Smith, Contr. (Lately noted.)

Schools.

Ark., Blytheville.—School Board, C. H. Windt, Secy. Special School Dist. No. 5; erect \$98,586 high school; 3 stories; fireproof; 96x127 ft.; G. A. Edelsvard, Archt., Courthouse Square; Stewart-McGehee Construction Co., Contr., Little Rock; Robinson Bros., Pine Bluff, Contrs. at \$4700 for plumbing; Blytheville Electric Co., wiring, \$944. (Lately noted.)

Ark., Morrilton.—School Board; erect high school; 2 stories and basement; brick and stone; asphalt roof; fireproof; steam heat; Jno. P. Almand, Archt., Boyle Bldg., Little Rock; Jas. H. Reddick, Contr., Fort Smith. (Previously noted.)

Md., Fork.—Baltimore County School Commissioners, W. S. Cook, Supt., Towson, Md.; erect \$20,000 school; 4 rooms; 1 story; Wm. F. Chew, Contr., 212 Clay St., Baltimore.

N. C., Selma.—School Board, W. B. Crumpton, Supt.; erect \$150,000 school; fireproof; composition floors; 116x160 ft.; Benton & Benton, Archts., Wilson, N. C.; J. A. Stout, Contr., Sanford, N. C. Address Mr. Crumpton. (Lately noted.)

Okla., Indianola.—Board of Education, Dr. J. R. Hood, Clk.; erect \$40,000 school; 1 story and basement; unit system; brick, stone and stucco; Monnot & Reid, Archts., Empire Bldg., Oklahoma City; C. F. Harwood, Contr., 323 W. Chickasaw St., Oklahoma City. (Lately noted.)

Okla., Oklahoma City.—State Board of Affairs; erect \$62,162 dormitory and superintendent's home at Oklahoma School for Blind; C. W. Dawson, Archt.; Dougherty-Nichols Construction Co., Contr., both Muskogee.

S. C., Glendale.—D. E. Converse Co.; erect \$20,000 school; 53x67 ft.; 2 stories and basement; brick; tile roof; rift pine floors; P. W. Holt, Contr.

Tex., Abilene.—Simmons College; erect \$90,000 arts building; 100x60 ft.; brick, concrete and stone; tile floors; heat from central plant; electric lights; D. S. Castle, Archt.; S. M. Seaby, Contr. (Lately noted.)

Va., Williamsburg.—William and Mary Col-

lege, Dr. A. B. Chandler, Prest.; erect dormitory for women; 3 stories and basement; 21x43 ft.; Chas. M. Robinson, Archt., Times-Dispatch Bldg., Richmond; J. C. Curtis, Contr., Denbigh, Va. (Lately noted.)

W. Va., Princeton.—Board of Education, J. E. Woodson, Secy.; erect \$15,000 addition to grade school; 2 stories; 30x60 ft.; A. F. Wyson, Archt.; L. E. Whitt, Contr.; also has plans by Mr. Wyson for \$50,000 grade school; 58x109 ft.; 2 stories and basement; brick.

Stores.

Fla., St. Petersburg.—Geo. E. Perkins; erect 2-story concrete block; 24x65 ft.; apartments above; \$10,000; W. S. Shull, Archt.; F. J. McDevitt, Contr.

Fla., Tampa.—O. Falk; erect 2-story addition to store building at Polk and Franklin Sts.; Oatley & Jones, Contrs.

Miss., Cleveland.—W. S. Poole and W. M. Berger; erect \$15,000 wholesale grocery building; 40x125 ft.; brick; composition roof; concrete floors; electric lights; Tri-State Construction Co., Archt. and Contr. Address Cleveland Grain & Brokerage Co. (Lately noted.)

Mo., Joplin.—Joplin Supply Co., 3d and Wall Sts.; erect \$170,000 business building and garage; 5 stories; 75x120 ft.; reinforced concrete, steel and brick; reinforced concrete floors; concrete foundation; C. A. Dieter, Contr., 410 N. Pearl St.

Mo., Kansas City.—Rothschilds & Sons; erect store and office building; 4 stories and basement; foundation to carry 11 stories; 23x124 ft.; reinforced concrete, brick and terra cotta; F. E. McIlvain, Archt., Orear-Lealie Bldg.; Fogel Construction Co., Contr., Reliance Bldg. (Lately noted.)

Okla., Oklahoma City.—B. F. Gill, 310 W. California Ave.; erect \$20,000 business building; 45x140 ft.; 2 stories; rubble stone, brick and mill construction; tar and gravel roof; concrete and pine floors; gas heat; electric lights; hand-power elevator; wire glass; Reinhart & Donovan Co., Contr., 725 Insurance Bldg. (Lately noted.)

Tex., New Castle.—J. P. Turner, Contr. to erect business building; brick.

Tex., San Antonio.—Chas. Siam and Geo. Collins; erect building; 8 stories; David A. Lown, Archt.; W. S. Dellerman, Contr.

Va., Danville.—Eldred & Co., Charlotte, N. C.; erect \$30,000 store building; 2 stories; 31x140 ft.; Heard & Chesterman, Archts., Arcade Bldg.; L. B. Flora & Son, Contrs., Arcade Bldg. (Lately noted.)

Va., Danville.—Z. V. Johnson; expend \$30,000 to rebuild department store; 30x146 ft.; brick; Heard & Chesterman, Archts.; W. K. Anderson, Contr.; both Arcade Bldg. (Lately noted.)

Va., Newport News.—L. Berman; erect \$30,000 store and apartment building; 2 stories; 50x100 ft.; Wm. Newton Diehl, Archt., Law Bldg.; R. V. Richardson, Contr., Hampton.

Va., Newport News.—Edwin K. Phillips, Law Bldg.; erect \$25,000 store and apartment building; hollow tile and stucco; 3 stories; 44x70 ft.; McKee, Williams & Pettibone, Archts., Law Bldg.; R. R. Cunningham, Contr., First National Bank Bldg. (Previously noted.)

Va., Portsmouth.—Joe Zedd; erect brick store and flat; \$11,000; H. C. Brown, Contr.

W. Va., Huntington.—Anderson-Newcomb Department Store; erect \$75,000 addition to building; 3 stories and basement; 60x160 ft.; Wm. F. Diehl, Archt., R. & P. Bldg.; J. W. Bell, Contr., 1457 4th Ave.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Theaters.

Ky., Paducah.—Arcade Theater Co., Leo F. Keyler, Prest.; alter and erect addition to theater; 2 stories and basement; steel and concrete; seating capacity 2216; Joseph & Joseph, Archts., Louisville; Katterjohn Construction Co., Contr., Paducah. (Lately noted.)

S. C., Westminster.—W. E. Cheswell; erect \$30,000 picture theater, store and office building; 75x90 ft.; brick, cement and sandstone; tin roof; terrazzo on first floor, Georgia rift pine on second; electric lights; Casey & Fant, Archts.; C. M. Guest, Contr., both Anderson, S. C.

Warehouses.

Ga., Albany.—Newsome Grain & Feed Co., Pittsburgh, Pa., Petersburg and Suffolk, Va.;

erect warehouse and factory; A. E. Ittner, Contr., Albany.

La., Monroe.—Southern Hardware Co.; erect \$70,000 warehouse; heavy brick construction; Barrett roof. Address Gehr Construction Co., Contr.

Md., Baltimore.—Baltimore Electrical Supply Co.; erect 5-story warehouse, Calvert and Pleasant Sts.; \$85,000; 70x100 ft.; brick; slag roof; wood floors; steam heat; electric lights; 2 electric elevators; F. E. Tormey, Archt., 813 Newington Ave.; J. J. O'Connor, Contr., 52 Knickerbocker Bldg. (Lately noted.)

Mo., St. Louis.—Stear Tire & Tube Co., Wm. L. Burgess, Prest.; erect \$35,000 building at Wellston; 1 story; 30x175 ft.; Koerner Engineering Co., Engr., Odd Fellows' Bldg.; Geo. Cousins & Co., Contrs., Chemical Bldg.

Okl., Oklahoma City.—Jos. Huckins; erect \$10,500 warehouse and repair-room; 50x100

ft.; 1 story; brick; built-up asphalt roof; cement floors; Bailey & Alden, Archts.; Ben Dancy, Contr., 510 E. 10th St.; materials purchased. (Lately noted under Stores.)

S. C., Greer.—J. B. Mendenhall and W. L. James; erect cotton warehouse; 2000-bale capacity.

S. C., Greenville.—Brandon Mills; erect warehouse; 100x100 ft.; 2 stories; also erect spindle duck mill and steam-power plant; J. E. Sirrine, Archt.-Engr.; Fiske-Carter Construction Co., Contr.

Va., Danville.—Planters' Tobacco Warehouse Co.; erect addition; contract let.

Va., Danville.—Piedmont Warehouse Co.; erect \$25,000 addition to building; 2 stories; 60x80 ft.; Heard & Chesterman, Archts., Arcade Bldg.; Anderson & Hunter Construction Co., Contr., Dudley Bldg.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Bank Fixtures.—Bank of Fort Blackmore, R. W. McConnell, Prest., Fort Blackmore, Va.—Prices on bank fixtures, safe, vault, etc.

Bank Fixtures.—J. R. Scott, Jr., Prest. First National Bank, Falfurrias, Tex.—Prices on bank fixtures, safe, vault, etc.

Barrel Machinery.—Wonham, Bates & Goode Trading Corp., 17 Battery Place, New York.—Machinery to mfr. oil casks; flaring, riveting and driving down hoops; hardwood stocks; Australian shipment.

Barrels.—High Point Machine Works, High Point, N. C.—Names and addresses mfrs. barrels and half-barrels; for castings and pipe fittings.

Bending Machinery.—Palm Products Co., Rush Bros., New Port Richey, Fla.—Bending mchy. and appliances.

Blacksmith Tools.—National Steel Rolling Co., 295 Passaic St., Newark, N. J.—Blacksmith tools. (See Rolling Mill Equipment.)

Boiler.—Treasury Dept., Supervising Archt. Office, Washington, D. C.—Bids until May 20; install firebox heating boiler in United States Postoffice at Henderson, Ky.; plans with custodian at Henderson or Archt.'s office.

Boiler.—John G. Duncan Co., 308 W. Jackson St., Knoxville, Tenn.—Dealers' prices on 10 to 15 H. P. upright boiler; 30 H. P. upright boiler; 100 lbs working pressure.

Boiler.—Board of Managers, Missouri Colony for Feeble-minded and Epileptic, Marshall, Mo.—Bids until May 14; construct power plant addition; install boiler; plans, etc., from J. H. Felt & Co., Archts., Kansas City, Mo.

Boilers.—Lock Box 41, Phillipsburg, N. J. Two 300 or 400 H. P. Heine water-tube boilers, 150 lbs. steam; full description.

Boiler Tubes.—Cypress Lumber Co., Apalachicola, Fla.—205 good second-hand boiler tubes, 7 ft. 7 in. long.

Bottling Equipment.—Click Chemical Co., Mfg. Chemists, J. J. Jones, Treas.-Supt., Winston-Salem, N. C.—Bottling mchy., glass, labels, etc.

Bridge Construction.—W. S. Keller, State Highway Engr., Bell Bldg., Montgomery, Ala.—Bids until June 7; reinforced concrete bridge and approaches over Big Creek in Coffee County; 67,000 lbs. reinforcing steel; 3000 cu. yds. sand-clay surfacing; plans, etc., on file.

Bridge Construction.—W. S. Keller, State Highway Engr., Bell Bldg., Montgomery, Ala.—Bids until June 7; reinforced concrete

bridge and approaches over Pea Creek in Dale County; plans, etc., on file.

Bridge Construction.—Woods County Commissioners, Alva, Okla., and Woodward County Commissioners, Woodward, Okla.—Invite new bids for bridge across Cimmaron River between Wood and Woodward counties; 48 32-ft. reinforced concrete girders; \$140,000; plans, etc., with State Highway Dept., R. E. Terrell, Engr., State Capitol Bldg., Oklahoma City.

Bridge Construction.—Tyler County Commissioners, W. A. Johnson, Judge, Woodville, Tex.—Bids until May 12; bridges and culverts; plans, etc., on file at Woodville and with Hess & Skinner, Engrs., Dallas, Tex.

Bridge Construction.—Seminole County Commrs., Sanford, Fla., and Lake County Commrs., Tavares, Fla.—Bids until May 12; 226-ft. wooden bridge across Wekiva River; plans, etc., with Commrs. at Sanford, Fla., and Tavares, Fla., and Fred T. Williams, Engr., Sanford, Fla.

Bridge Construction.—Limestone County Commrs., J. E. Bradley, Judge, Groesbeck, Tex.—Bids until May 10; bridges and roads in Groesbeck, Thornton and Mexia Dist.; plans, etc., with Fred P. Holt, Engr.

Bridge Construction.—St. Johns County Commrs., Obe P. Goode, Clerk, St. Augustine, Fla.—Bids until May 11; changed date from Apr. 20; 58 reinforced concrete bridges, including Matanzas and North River bridges; 111.1 mi. road; plans, etc., with Clerk and Gould T. Butler, Engr.

Building Material.—Robt. L. Harris, 703 Calvert Bldg., Baltimore, Md.—Prices on all work for construction of \$15,000 bank building, Upper Marlboro, Md.

Cars.—Sylecau Mfg. Co., Rock Hill, S. C. 4 to 6 logging cars, narrow gauge; location; term of service.

Compressor.—Shartle Machine Co., 389 Dublin Ave., Columbus, O.—450 to 500-ft. steam-driven air compressor, 2-stage, 240 to 260 lbs. air.

Compressor.—John G. Duncan Co., Jackson and Central Sts., Knoxville, Tenn.—Dealer's price for quick delivery on 7x6 or 8x6 cylinder belt-driven air compressor; second-hand.

Compressor, etc.—Panama Canal, A. L. Flint, Gen. Purchasing Officer, Washington, D. C.—Bids until May 25 to furnish: Air compressor; pipe-cutting and vertical punching machines; weightometer; woodworker; dipper rack castings; steam ejector; flexible joints; water buckets; brass cuspidors;

grindstones; lanterns; oilers; brass screws; copper tacks; builders' hardware; padlocks; file card brushes; paint and whitewash brushes; leather gloves; ax and hammer handles; snaths; folding rules; wood chair seats; steel tapes; etc. Blank forms and information (Circular 1366) on application to offices of: Panama Canal; Asst. Purchasing Agents at 24 State St., New York; 606 Common St., New Orleans; Fort Mason, San Francisco; United States Engineer offices throughout country.

Compressors.—John G. Duncan Co., 308 W. Jackson St., Knoxville, Tenn.—Dealers' prices on 200 to 300 cu. ft. capacity belt-driven air compressors; 100 lbs. working pressure; immediate delivery.

Concrete Chutes.—R. K. Stewart & Son, Contrs., High Point, N. C.—Concrete chutes. **Containers.**—See Bottling Equipment.

Condenser.—City of Apalachicola, Fla., J. F. Warren, City Cash.—Condenser for electric-light plant.

Crusher.—T. W. Dennis, M. E., Lanoka, N. J.—Large size rock crusher; mill for pulverizing rock.

Cutting Machinery, etc.—Palm Products Co., Rush Bros., New Port Richey, Fla.—Split-making and cutting mchy.

Dragline.—Roy C. Wayne, 608 W. Jefferson St., Louisville, Ky.—Bucyrus class 14 dragline machine, 90-ft. boom; Marion 36, 50-ft. boom; both on caterpillar crawlers; state age, condition, location and price.

Drainage Ditches.—New Hanover County Drainage Dist. No. 2, E. H. Freeman, Chrmn. Commrs., Wilmington, N. C.—Bids until May 18; construct 3 mi. drainage ditches; 13,000 cu. yds. excavation; 2 wooden bridges at Winter Park, N. C.; plans with J. L. Becton, Engr., Wilmington, N. C.

Drainage System.—Clermont Drainage Dist., Lake County Commrs., L. V. Simpson, Chrmn., Tavares, Fla.—Bids until June 7; construct drainage system; 685,000 cu. yds. excavation; lock and dam; 9 drainage wells; plans with Fred T. Williams, Engr., Sanford, Fla.

Drainage System.—Bunches Bend Drainage Dist. Commrs., Lake Providence, La.—Bids until May 18; construct 8 3/10 mi. drainage canals; 362,500 cu. yds.; plans with Holland-Delta Co., 1315 Bank of Commerce Bldg., Memphis, Tenn.

Drainage System.—Welsh Drainage Dist. No. 1, John T. Hood, Secy., Welsh, La.—Bids until May 31; construct 2 mi. canal with laterals; \$125,000; Ardis Colbert, Engr., Jennings, La.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Drainage System.—Critz & Critz, West Point, Miss.—Bids on 4,000,000 yds. drainage system.

Drill.—Northeast Oklahoma Railroad Co., Mining Exchange Bldg., Miami, Okla.—3-ft. triple purpose plain radial drill, plain box table and gear box, motor or belt drive; 3-phase, 60-cycle, 220-volt, A. C.

Drying Equipment.—J. M. Calhoun, Marianna, Fla.—Data and prices on sweet-potato drying outfit, process, etc.

Electric Plant.—City of Kinston, N. C., Joe Dawson, Mayor.—Bids until May 18 (postponed from May 11); power plant equipment; 1500 K. W. turbo-generator unit; surface condenser complete with dry vacuum and hot-well pumps; 25 K. W. turbine-driven exciter unit; 7-panel switchboards; two 25 K. W. street-lighting transformers; pumps; 1500 H. P. water heater; 2 superheaters; 2 underfeed mechanical stoker units; brick chimney, etc.; plans, etc., from W. C. Olsen, Consult. Engr., Sumter, S. C. (Further facts lately noted.)

Electrical Equipment.—P. O. Box 19, Atkinson, N. C.—Automatic engine between 35 and 50 H. P. at 100 lbs. steam; 25 K. V. A. alternator, 2300 volts, 3-phase, 60-cycle; first-class condition; particulars in first letter.

Electrical Supplies, etc.—W. M. Hinkle & Co., 55 Shaki St., Canton, China.—To represent mfrs. and exporters of: Electrical, ship-chandlers', household, bottlers', book, typewriters', motor car and office supplies; paper and stationery; canned goods; brassware; cigars and cigarettes; patent medicine; toilet articles.

Engine.—See Electrical Equipment.

Engine.—City of Apalachicola, Fla., J. F. Warren, City Cash.—Engine for electric-light plant.

Engine.—T. W. Dennis, M. E., Lanoka, N. J.—150 H. P. steam or crude oil engine.

Engine.—John M. J. Ludwig, St. Augustine, Fla.—1 or ½ H. P. gasoline engine.

Engine.—John G. Duncan Co., 308 W. Jackson Ave., Knoxville, Tenn.—Dealers' prices on 12x16 double engine, throttling type, speed 200 R. P. M.; quick delivery.

Engines, etc.—Hackley Morrison Co., 204 Moore Bldg., Richmond, Va.—10 portable boilers and engines; on wheels or skids.

Excelsior Machinery.—W. B. Ferguson & Co., Suffolk, Va.—Excelsior machinery.

Feed Mill Supplies.—Huntington Tie & Lumber Co., Huntington Hotel Bldg., Huntington, W. Va.—To represent mfrs. of feed mill supplies in Virginia, West Virginia and Kentucky.

Filing Cabinet Slides.—Victor Barbosa & Co., Cartagena, Columbia, S. A.—To correspond with mfrs. of anti-friction slides for filing cabinets.

Food Products.—Georges Posso, Representant De Fabriques 29, Cours De Luze, Bordeaux, France.—To represent mfrs. of flour, tobacco and sugar.

Generator.—Electric Machinery Equipment Co., 714 W. Van Buren St., Chicago, Ill.—500 K. W. 220-volt D. C. turbo-generator set; immediate delivery.

Generators.—City of Apalachicola, Fla., J. F. Warren, City Cash.—Generators for electric-light plant.

Hardware.—Georges Posso, Representant De Fabriques, 29 Cours De Luze, Bordeaux, France.—To represent mfrs. of nails, iron wire, tin and tin plate, iron flats and rounds and galvanized wrought-iron boilers.

Hoist.—R. K. Stewart & Son, Contrs., High Point, N. C.—Gasoline or steam hoist.

Hoisting Equipment.—Texas Granite Co., Llano, Tex.—Hoisting engine, derrick, cable and guys.

Hoisting Machine.—Cypress Lumber Co., Apalachicola, Fla.—Good second-hand 6x8 two-drum hoisting machine with boiler; use as pile driver.

Lathe.—Northeast Oklahoma Railroad Co., Mining Exchange Bldg., Miami, Okla.—36-in. by 14-ft. heavy pattern lathe, 9 ft. 9½ in. between centers, motors or belt driven, 3-phase, 60-cycle, 220-volt, A. C.

Lathes.—Comms. Office, Room 509 District Bldg., Washington, D. C.—Bids until May 17; furnish, deliver and place in position 3 engine lathes for public schools; plans with Purchasing Officer, Room 320 District Bldg.

Laundry Equipment.—Treasury Department, Supervising Archt.'s Office, Washington, D. C.—Bids until June 1; mechanical equipment of laundry for U. S. Marine Hospital at New York (Stapleton); plans with Chief Engr., Room 731, United States Custom-house, New York, or Archt.

Locomotive.—John G. Duncan Co., 308 W. Jackson St., Knoxville, Tenn.—7 to 10-ton oil-burning 36-in. gauge track locomotive; dealers' price, quick delivery; second-hand 36-in. gauge oil-burning locomotives.

Locomotive.—Sylecau Mfg. Co., Rock Hill, S. C.—5 to 10-ton locomotive; prefer 5-ton; location; term of service.

Looms.—Palm Products Co., Rush Bros., New Port Richey, Fla.—Looms to weave wool spits.

Machine Tools.—National Steel Rolling Co., 295 Passaic St., Newark, N. J.—Machine shop equipment. (See Rolling Mill Machinery.)

Machine Tools.—Northeast Oklahoma Railroad Co., H. B. Cobban, Gen. Mgr., Miami, Okla.—Railway shop equipment.

Manufactured Products.—Nicolas St. Triphon, Rue Saint-Mark, No. 1, Alexandria, Egypt.—To represent American mfrs.

Metal Shelving.—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C.—Bids until May 20 for mezzanine floor and metal shelving in sub-basement storeroom of Treasury Annex; copies of specifications and drawings No. SA-401 from office Supervising Archt.

Mixer.—R. K. Stewart & Son, Contrs., High Point, N. C.—New or second-hand ½-yd. concrete mixer.

Meters.—City of Charlotte, N. C., John M. Wilson, Purchasing Agent.—Bids until May 11; 200 ½-in. water meters, delivered in lots of 50 in one year; specifications, etc., from Supt. of Water-works.

Motor.—Cambridge Brick Co., H. L. Longenecker, Mgr., Cambridge, Md.—10 H. P. 60-cycle 900 or 1200 R. P. M. 3-phase 220-volt induction motor.

Motors.—National Steel Rolling Co., 295 Passaic St., Newark, N. J.—Electric motors. (See Rolling Mill Equipment.)

Motors.—Palm Products Co., Rush Bros., New Port Richey, Fla.—1 to 3 H. P. 3-phase motors.

Motors (Gas).—Partridge Tractor Co., W. W. Carson, Gen. Mgr., 701 Graham Bldg., Jacksonville, Fla.—Names and addresses mfrs. 2-cylinder 4x4 gas tractor motors for light cultivator.

Moulder.—Atlantic Engineering Co., 20 Commercial Bank Bldg., Savannah, Ga.—Outside moulder; 4x6 or 4x9; new or used; dealers' prices for Florida delivery.

Office Equipment.—West Cliff Oil Co., John Damhouser, Secy., Box 243, Cleveland, Okla. Office equipment.

Paving.—City, J. W. Saunders, Mayor, Charleston, Miss.—Bids until May 18; 35,000 sq. yds. paving; concrete, asphaltic concrete and gravel; 18,000 lin. ft. concrete curb and gutter; 1600 lin. ft. sewer pipe; plans, etc.,

with Mayor and Dabney Engineering Co., Engr., Memphis, Tenn.

Paving.—City, J. I. Lee, Mayor, Demopolis, Ala.—Bids about May 15; pave streets; \$90,000 available; Robert L. Totten, Engr., Birmingham, Ala.

Paving.—City Comms., Ada, Okla.—Bids in June; 160,000 sq. yds. concrete and rock asphalt paving; \$900,000; Johnson & Benham, Const. Engrs., Firestone Bldg., Kansas City, Mo.

Paving.—City, G. F. Border, Mayor, Mangum, Okla.—Bids until May 18; improve streets in Dist. No. 1; 40,000 sq. yds. asphaltic concrete; plans, etc., with Johnson & Benham, Const. Engrs., Firestone Bldg., Kansas City, Mo.

Paving.—City of Jefferson City, Mo.—Bids until May 18; pave Madison St.; bituminous macadam; Linn F. Brown, City Engr.

Paving.—City Comms.' Improvement Dists. 20 and 21, Dan L. Jones, Secy., Jonesboro, Ark.—Bids until May 10; pave streets; 31,965 sq. yds. asphaltic concrete; 35,164 lin. ft. concrete curb and gutter; plans, etc., with Secy. and Cobb & Lee, Engrs.

Paving.—Bibb County Comms., J. Ross Bowdre, Clerk, Macon, Ga.—Bids until June 4; 4 mi. Columbus road; 42,092 sq. yds. concrete, bituminous macadam, willite or Kentucky rock asphalt paving; plans, etc., on file at Macon and with S. R. Shi, Engr., 313 Grand Bldg.

Paving.—City of Gassaway, W. Va.—Bids about June 10; pave streets and construct sewers; \$50,000 to \$80,000; Roberts Engineering Co., Engr., 325 The Ruffner, Charleston, W. Va.

Paving Material.—District of Columbia Comms., 500 District Bldg., Washington, D. C.—Bids until May 27; furnish and deliver asphalt paving blocks; repressed vitrified paving blocks; repressed vitrified sewer invert bricks; Portland cement; road oils; gravel, etc.; information and specifications with Purchasing Officer, 320 District Bldg.

Pipe.—Newland Light & Power Co., E. C. Guy, Mgr., Newland, N. C.—500 lin. ft. 15 to 20-in. diameter steel or spiral pipe.

Pipe.—City of Palacios, Tex., Jas. W. Sartwell, Mayor.—Pipe for \$34,000 sewer system and disposal plant.

Pipe.—City of Charleston, Miss., J. W. Saunders, Mayor.—Bids until May 18; lay 1600 lin. ft. 12 to 30-in. sewer pipe; plans, etc., from Dabney Engineering Co., Memphis, Tenn.

Piping.—Thirty-two Oil & Gas Co., E. A. Park, Engr., Blacksville, W. Va.—Casing to be delivered to Smith's Grove, Ky.

Piping.—Stokes Oil & Refining Co., J. M. Stokes, 403 Prudential Bldg., San Antonio, Tex.—Bids until June 1; 6-in. line pipe and 2-in. tubing; 15,000 ft. each.

Planer.—Bridgewater Plow Corp., Bridge-water, Va.—Cheap single wood planer or surfacer for immediate delivery; send price and cut of machine.

Press.—Alfred Box & Co., G. A. Mitchell, Sales Mgr., Philadelphia, Pa.—50-ton capacity vertical hydraulic press; 12-in. stroke, 36-in. between uprights, 220-volt motor drive with double pumps or other device for slow and fast feeds; down-push type with pressure gauge and safety valve.

Pulleys.—See Rolling Mill Equipment.

Pulley Moulder.—C. H. Turner Foundry Co., Statesville, N. C.—Second-hand pulley moulding machine; 24x36-in.; with iron flask.

Pulverizer.—See Crusher.

Pumps.—Lawrence MacRea, 716 W. Breckenridge St., Louisville, Ky.—Names and addresses mfrs. small gasoline pumps.

Rails.—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—Second-hand 25-lb. steel relaying rails; car-load lots; f. o. b. Lexington.

Rails.—Syleeacau Mfg. Co., Rock Hill, S. C. 4 mi. 30-lb. relaying rails with bolts and plates; location; term of service.

Road Construction.—Kanawha County, L. C. Massey, Clerk, Charleston, W. Va.—Bids until June 2; 2.96 mi. Class A Elk River road; plans, etc., with County Engr. and State Road Comsn., both Charleston.

Road Construction.—Grayson County Commissioners, Dayton B. Steed, Judge, Sherman, Tex.—Bids until May 12; 9 mi. gravel road in Road Dist. No. 6; plans, etc., with Julian C. Feld, Engr., Denison, Tex.

Road Construction.—Nicholas County Commrs., John P. Sugg, Clerk, Carlisle, Ky. Bids until May 14; 8 mi. Carlisle and Miller Station turnpike; specifications, etc., with Clerk.

Road Construction.—State Highway Board, Jefferson City, Mo.—Bids until May 17; 3.18 mi. State Road Project No. 52 from Cape Girardeau; culverts and bridges; plans, etc., with County Clk., Jackson, Mo., and State Highway Dept., Jefferson City.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.—Bids until May 14; 5.04 mi. State Highway in Mitchell County; Federal-aid Project No. 94; 26,360 sq. yds. bituminous macadam; 6340 lbs. reinforcing steel; plans, etc., with State Highway Comsn., W. S. Fallis, Engr., Raleigh, N. C.

Road Construction.—Erath County, E. E. Solomon, Judge, Stephenville, Tex.—Bids until May 21; improve roads; 139,357.9 cu. yds. gravel; plans, etc., on file at Stephenville and with State Highway Dept., Capitol Bldg., Austin, Tex.

Road Construction.—St. Johns County Commrs., Obe P. Goode, Clerk, St. Augustine, Fla.—Bids until May 11; changed date from April 20; 111.1 mi. road; 58 bridges; plans, etc., with Clerk and Gould T. Butler, Engr.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.—Bids until May 14; 4.83 mi. State Highway in Jackson County; Federal-aid Project No. 70; 7795 cu. yds. topsoil surfacing; plans, etc., with State Highway Comsn., W. S. Fallis, Engr., Raleigh, N. C.

Road Construction.—St. Louis County Commrs., Clayton, Mo.—Bids until May 12; 12.86 mi. State road, Project 79; culverts; bridges; plans, etc., with County Clerk and Wm. Elbring, Engr.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.—Bids until May 14; 6.76 mi. State Highway in McDowell County; Federal-aid Project No. 84A; 16,610 cu. yds. topsoil surfacing; plans, etc., with State Highway Comsn., W. S. Fallis, Engr., Raleigh.

Road Construction.—North Carolina State Highway Comsn., Div. Office, Asheville, N. C.—Bids until May 14; 8.33 mi. State Highway in Burke and McDowell Counties; Federal-aid Project No. 84B; 20,469 cu. yds. topsoil surfacing; bridges and culverts; plans, etc., with State Highway Comsn., W. S. Fallis, Engr., Raleigh.

Road Construction.—Limestone County Commrs., J. E. Bradley, Judge, Groesbeck, Tex.—Bids until May 10; roads and bridges in Groesbeck, Thornton and Mexia Dists.; plans, etc., with Fred P. Holt, Engr.

Road Construction.—Hunt County Permanent Road Board, John L. English, Secy., Greenville, Tex.—Bids until May 12; 14.8 mi. Greenville-Wolf City road; plans, etc., with A. D. Duck, Engr., Levy Bldg.

Road Construction.—Collin County, George W. Fox, Auditor, McKinney, Tex.—Bids until May 11; improve roads in Dists. 7, 24, 25, 26, 27, 28 and 29; plans, etc., with J. B. Crockett, Engr.

Road Construction.—Delta County, I. B. Lane, Judge, Cooper, Tex.—Bids until May 14; 11.70 mi. gravel road; State Highway No. 39; plans, etc., with Cock & Nagle, Engrs., Cooper, and State Highway Dept., Austin, Tex.

Road Construction.—Cross Keys Township Highway Comsn., Cross Keys, S. C.—Bids until May 12; 1.78 mi. topsoil road in Union County; plans, etc., with H. C. Wilburn, Cross Keys, and State Highway Engr., Columbia, S. C.

Rolling Mill Equipment.—National Steel Rolling Co., Philip C. Walsh 3d, Mgr., 295 Passaic St., Newark, N. J.—Special design rolling mill mchy.; electric motors; shears; machine tools; blacksmith tools; pulleys; for plant 25 tons daily capacity bar iron and steel.

Safe.—See Bank Fixtures.

Safe.—F. Chalmers Rogers, J. Prest. Bank of Fork, Ark., S. C.—Prices on safe.

Saw.—Northeast Oklahoma Railroad Co., Mining Exchange Bldg., Miami, Okla.—6x6-in. speed draw-out hacksaw; motor or belt driven, 3-phase, 60-cycle, 220-volt, A. C.

Sawmills.—Hackley Morrison Co., 204 Moore Bldg., Richmond, Va.—10 small portable sawmills; on wheels or skids.

Sawmill Supplies.—Huntington Tie & Lumber Co., Huntington Hotel Bldg., Huntington, W. Va.—To represent mfrs. of sawmill supplies in Virginia, West Virginia and Kentucky.

Sawmill.—Syleeacau Mfg. Co., Rock Hill, S. C.—Prices on 30,000-ft. daily capacity sawmill with boiler and engine, capable of running saw and planing mill with planer, edger, trimmer and drykiln; state location; term of service; best shipment.

Scales.—High Point Machine Works, High Point, N. C.—Names and addresses mfrs. of small delicate scales for computing moisture from wood, weighing 10 lbs. and under.

Sewers.—City of Gassaway, W. Va.—Bids about June 10; construct sewers; Roberts Engineering Co., Const. Engr., 325 The Ruffner, Charleston, W. Va.

Sewer Construction.—Commrs. of Public Works, J. B. Holman, Batesburg, S. C.—Bids until May 27; construct sewer system; two 34,000 lin. ft. 9 and 10-in. septic tanks, 12-in. vitrified clay pipe, 56 manholes, 10 flush holes; plans, etc., from Nisbet Wingfield, Const. Engr., Augusta, Ga.

Sewer Construction.—City of Mexico, Mo., J. W. Gallagher, Acting Mayor.—Bids until May 10; construct sewage-disposal plants and outfall sewers; plans, etc., from Black & Veatch, Const. Engrs., Suite 701 Mutual Bldg., Kansas City, Mo.

Sewage-disposal Plant.—City of Palacios, Tex., Jas. W. Sartwell, Mayor.—Materials for \$34,000 disposal plant and sewer system.

Shovel.—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—% to 1-yd. steam traction shovel.

Smokestack.—American Ice Co., Oxford, Md.—Second-hand smokestack, 28 in. by 50 ft.; good condition; lowest cash figure f. o. b. steamer or cars.

Soap Machinery.—Texas Product Mfg. Co., N. A. Harper, Prest.-Mgr., Sweetwater, Tex. Bids until June 1; soap mills, mixers, plodders, moulds, dyes, frames, slabbers, cutters, chippers, sulphuric acid plant, crutchers, kettles, steel storage tanks, etc., for 50-ton mill.

Spindle Machinery.—Coombs Co., J. B. Warren, Apalachicola, Fla.—Names and addresses mfrs. spindle mchy.

Steaming Machinery.—Palm Products Co., Rush Bros., New Port Richey, Fla.—Steaming mchy.

Steel Sheet.—Corcoran Mfg. Co., Cincinnati, O.—22 or 24-gauge steel sheet for enameling and forming into fender tops; unit size 9x 60; wire description, quantity and price.

Switch.—Cambridge Brick Co., H. L. Longenecker, Mgr., Cambridge, Md.—Used, not new, 25-lb. rail switch, points, frog and throw.

Tanks.—Lock Box 41, Phillipsburg, N. J. Three 8000, 10,000, 15,000, 20,000-gallon round closed or upright tanks; new or used; full description.

Telephone Equipment.—Justrite Telephone Co., Rhodella, Ky.—Telephone equipment.

Telephone Supplies.—Thomaston Telephone Co., M. A. Burklow, Mgr., Thomaston, Ala.—General telephone supplies.

Textiles, etc.—Globe Commercial Co., Arthur I. de Saldana, Managing Director, 18 Water St., Georgetown, Demerara, S. A.—To represent mfrs. and exporters of: Textiles; boots and shoes; laces; Palm Beach cloth; silk trousers; hosiery; straw and felt hats; underwear; clothing; toilet articles; laundry soap; stationery; confectionery; cement; lumber; toys, etc.

Tubing.—Thirty-two Oil & Gas Co., E. A. Park, Engr., Blacksville, W. Va.—Tubing to be delivered to Smith's Grove, Ky.

Vault, etc.—See Bank Fixtures.

Water Meters.—Water Dept., John M. Wilson, Purchasing Agent, Charlotte, N. C.—200 water meters, 5 ft. 8 in.; bids until May 11.

Waterproofing.—Edgecombe Chamber of Commerce, R. G. Shackell, Secy., Tarboro, N. C.—Names and addresses mfrs. waterproofing for concrete bricks.

Water-works Construction.—Commrs. of Public Works, J. B. Holman, Batesburg, S. C. Bids until May 17; construct water-works; 50-ft. diam. concrete reservoir, 150 H. P. boiler, two 500,000-gal. capacity pumps, pumping-station addition; 450 tons 6 to 10-in. cast-iron pipe, 10 tons special castings; 29 hydrants, 33 valves; plans, etc., from Nisbet Wingfield, Const. Engr., Augusta, Ga.

Weaving Machinery.—Textile Waterproofing Co., Box 137, Memphis, Tenn.—Machinery to mfr. webbing and endless fabric automobile fan belt.

Well-drilling Equipment.—West Cliff Oil Co., John Damhouser, Secy., Box 243, Cleveland, Okla.—Well-drilling equipment.

Well Drill.—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—1200 to 2000-ft. capacity oil well drilling machine.

Well-drilling Equipment.—Railroaders' Oil Co., G. B. Crowe, Field Mgr., 204 Republic Bldg., Louisville, Ky.—Data and prices on well-drilling equipment.

Winder.—Russell Mfg. Co., Middletown, Conn.—60-spindle Payne winder.

Wire Cloth.—Central Compress Co., P. T. Calloway, Supt., Temple, Tex.—Quotations on wire cloth.

Wire.—Town of Youngsville, N. C., J. R. Pearce, Mayor.—Prices on wire, poles, cross-arms, etc., necessary to install electric lights.

Woodworking Equipment.—See Spindle Machinery.

Woodworking Machinery.—Palm Products Co., Rush Bros., New Port Richey, Fla.—Light woodworking mchy.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Railroad Construction

Railways.

Md., Frederick.—Hagerstown & Frederick Railway Co. proposes to issue \$65,000 of bonds for improvements. E. L. Coblenz, Frederick, Md., is Prest.

N. C., New Holland.—North Carolina Farms Co. projects construction of a railroad from New Holland to connect with the Norfolk Southern Railroad, probably at either Belhaven or Bishop Cross, 20 or 25 mi.

Va., Fredericksburg.—Potomac, Fredericksburg & Piedmont Railroad Co. contemplates

widening its track from 3-ft. gauge to 4 ft. 8½ in., or standard gauge. Line is 38 mi. long. George W. Richards is Prest.

W. Va., Lenore.—Norfolk & Western Railway Co., it is reported, will build 18 mi. railroad from Lenore to open up coal lands on Rockhouse Fork of Pigeon Creek. J. E. Crawford, Roanoke, Va., is Ch. Engr.

Street Railways.

Tex., Houston.—Houston Electric Co. proposes to spend about \$1,000,000 for improvements, including considerable double tracking, additional sidings, connecting tracks and other line work. W. E. Wood is Mgr.

included office buildings, laboratories and ample housing facilities for employees. In addition to this property the purchasers also acquire 60 acres of high-grade fire-clay lands at Bonhamton, and a clay excavating plant in operation. Besides the regular line of made-up refractories the new plant will also produce a complete line of high-grade refractory cements. The Carborundum Co. already makes 10 special grades of cement.

Engineering Partnership.

Announcement is made of the partnership of Richardson & Gray, consulting engineers, 220 Devonshire St., Boston, Mass. Mr. Richardson, formerly of Richardson & Hale, consulting engineers, went overseas with the 26th Division, and was discharged from the U. S. Army in 1919 as Lieutenant-Colonel Field Artillery. Mr. Gray has been for the past nine years in the Boston office of Stone & Webster, division of construction and engineering.

Electric Furnace Contract.

The Electric Furnace Construction Co. of Philadelphia, has closed a contract with the Emery Steel Co. of Baltimore for an electric furnace of new design for annealing steel castings.

Valuable Steamer to Be Sold

The offering for sale of the steamer Gaston of the Old Bay Line—Baltimore Steam Packet Co.—Baltimore, which is announced on another page, is of more than common interest because of the great demand for maritime tonnage. The Gaston is a full-equipped vessel of 500 tons cargo capacity and has compound engines giving a speed of from 12 to 14 miles per hour. Length is 212 feet and width 31½ feet, depth being 19 feet.

Appointment.

E. G. Lewis, formerly manager of the Cleveland office of the Bucyrus Company of South Milwaukee, Wis., has been appointed central sales manager of this company, with headquarters at 622 McCormick Bldg., Chicago, where he will succeed E. C. Hingston, who has resigned. The Cleveland office, which was opened by the company September 1, 1919, will be continued under the supervision of Mr. Lewis.

Now at Jacksonville.

Dexter & Wright, dealers in machinery and equipment, formerly having an office and storage yards at Brunswick, Ga., in charge of A. J. Wright, have discontinued there, and headquarters are now at Jacksonville, Fla., where they are installing a machine shop and conducting their related business activities, Mr. Wright being also associated with H. W. Dexter in that city. Office is at 510 Bisbee Bldg., and storage yards at the intersection of E. 16th St. and the railroad yards, Jacksonville. Postoffice address, Box 665. They handle skidders, log loaders, locomotives, cars, relaying rails, locomotive cranes, engines, boilers, sawmill machinery, etc.

Appointment.

B. P. Friedman, recently connected with the chemical service department of the Permutit Company, has joined the sales force of the textile division of L. Sonneborn Sons, Inc., of New York City. His headquarters will be in Atlanta, Ga., and Montgomery, Ala., and his abilities in technical and chemical lines, as well as his sales services, will be at the disposal of users of "Amalie" textile products in the South.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Important Sale of Plant.

Announcement is made in another column of the resale on Saturday, May 22, at noon of the plant of the General Shipbuilding Co., Inc., at Alexandria, Va., the sale to take place on the premises. There are six acres of land, 14 buildings, the largest 175x220 feet, and many other facilities. Particulars will be furnished by Louis N. Duffey, trustee, 123 S. Royal St., Alexandria, Va.

Electrode Cooling Ring.

The Electric Furnace Construction Co., Finance Building, Philadelphia, have recently introduced an electrode cooling ring and economizer, which, they state, effectively prevents the ignition of the hot gases escaping from the furnace roof, and that the net result of this is considerable saving in the wear of the furnace roof, and also great economy in the amount of electrodes consumed. The company believes that this marks a distinct advance in electric furnace practice and application has been made for patenting the device, which is amply described in a small folder, accompanied by a sketch showing the new invention. It is further remarked that the cooling ring keeps the roof portholes cool, keeps the electrode reasonably cool, and, moreover, cools down the gases as they leave the furnace to a degree at which they will not burn when they meet the oxygen of the atmosphere.

Elected a Director.

At a recent meeting of the board of directors of the Wellman-Seaver-Morgan Company, Cleveland, O., John A. Penton, president of the Penton Publishing Co., was elected a director to fill the vacancy on the board caused by the death of Samuel T. Wellman. It is stated that Mr. Penton's intimate knowledge of the iron and steel trade, his wide acquaintanceship with prominent people in all lines of industry in this and many foreign countries, and his keen insight into business matters will make him a valued co-worker in the affairs of the company.

Manila Rope for Our Battleships.

Two handsome folders have been issued by the Whitlock Cordage Co., 46 South street, New York, one of which carries upon its outside page this sentence: "The U. S. Navy said 'O. K.' to the 1,400,000 lbs. of Whitlock manila rope bought in a single purchase for the Navy Yard at Portsmouth, Va." Below is a picture of a battleship at sea, and within is another illustration showing a fleet of

these great engines of war going at full speed. The other folder contains tables displaying the different sizes, weights, lengths and strengths of the all-manila rope made by this company, and also its approximate cost per 100 feet.

Big Enlargement of Electric Works.

The Valley Electric Co. of St. Louis, which has taken over the St. Louis Electrical Works, is erecting new factory buildings, and production will be increased many times. The new company was formed with \$525,000 capital stock for the purpose of acquiring the entire business, assets and good-will of the former company, whose business had grown to such proportions that it could not be handled with the previous capitalization of \$100,000. A handsome catalog, called "The Motor Book," has been issued and contains, in addition to many other pictures, an illustration showing the new factory plant. The name of the "St. Louis Motor" has been changed to the "Valley Motor," it is stated, to give it the individuality which it merited—its old name having been common to the product of a number of other different industrial plants. This product of the works is aptly described as "An efficient, hard-working, ball-bearing induction motor." The illustrations in the book show not only the motor and its different parts, but interior views of the plant. There are also dimension charts and tables, besides other data of value.

Important Plant Acquired.

The Carborundum Co. of Niagara Falls, N. Y., has acquired from the Allen Property Custodian the plant formerly owned and operated by the Didier-March Company at Perth Amboy, N. J. The plant will be taken over immediately and converted to the manufacture of a complete line of Carborundum refractories, which are giving exceptional service in a wide range of high temperature furnace work. The principal business of the Didier-March Company was the manufacture of special refractory clay products and practically all of its equipment is well adapted for the processes to which it will now be devoted. This plant is situated on 24 acres of land fronting on the Raritan River near Perth Amboy, and is provided with wharfing and railroad facilities. It consists of a modern clayworking and refractory plant, with a capacity of over 100 tons per day, and covers a floor space of about 300,000 square feet. The buildings are of substantial brick, steel and concrete construction, and there are also

Soon to Be in New Shop.

The Greenville Iron Works, Inc., founders and machinists, Greenville, S. C., expect to be in their new building within the next 60 days, when they will be in a position to take care of any size job which may be offered. The plant, which is capitalized at \$75,000, has bought new lathes, milling machines, cut-off saws, wood planers, boring mills, etc., for the new shop, in addition to an entire new foundry equipment, comprising cupola, blowers, ladles, cranes, flasks, etc. The company is doing business in North Carolina, South Carolina and Georgia, and as time goes on hopes to extend its activities into other States, besides enlarging its lines of work. The Greenville Iron Works was organized about six years ago, and the recent steady expansion of its business has compelled the erection of a larger plant.

Engineering of Magnitude.

Black, McKenney & Stewart, engineers, 618 17th St. N. W., Washington, D. C., have been commissioned to make studies, report and designs for the opening of the Magdalena River, Colombia, South America, to ocean-going steamers, a project of magnitude which, successfully accomplished, will throw open to world trade a wonderfully rich country. This firm is especially well organized for carrying on the work of consultation, organization and administration in the specialties of river and harbor, port and terminal work, hydro-electric development and municipal and highway engineering. Its members are Major-Gen. William M. Black, U. S. A., retired, who during the recent war was chief of engineers in the army, and who is also author of sundry works on engineering; he has had years of experience in Government engineering here, in Cuba and in Panama. Colonel Charles A. McKenney, who, prior to the war with Germany, had extensive municipal engineering experience in Washington, and Lieut.-Col. John Stewart, who before being engaged in engineering work with the army during the war was extensively occupied in construction engineering of varied character, including paving, buildings, road construction, etc.

Now in Own Building.

The Foundation Company announces its location on and after May 10 in its own building, 120 Liberty St., New York City. Among the new construction which the company has undertaken are buildings for the following: Dunlop, America, Limited, Buffalo, N. Y.; Acme White Lead & Color Works and Buhl Sons Company, both of Detroit, Mich.; U. S. Cast Iron Pipe & Foundry Co., Addyston, Ohio; General Fire Extinguisher Co., Warren, Ohio; Susquehanna Silk Mills, Huntington, Pa.; Utica Spinning Co., Utica, N. Y.; America-LaFrance Engine Co., Bloomfield, N. J.; Atlantic Ice & Coal Corp., Atlanta, Ga.; Standard Oil Co. of California, San Francisco; Canadian Pacific Railway, Montreal; Electric Reduction Co., Buckingham, Province of Quebec, Canada.

Standardization in Gear Industry.

At a meeting of the executive committee of the American Gear Manufacturers' Association, held at the close of the Detroit Convention, May 1, officers were re-elected as follows: President, F. W. Sinram; vice-president, R. E. Eberhardt; secretary-treasurer, Frank D. Hamlin. The association, organized three years ago, has grown from eight to eighty member companies, and not one company has withdrawn. Messrs. Sinram

and Hamlin have been respectively president and secretary-treasurer ever since the organization was formed. A leading feature of the convention just closed was the devotion of an entire day to discussing standardization in the gear industry with a view to greater production.

New Desk System File.

A "Time Saving Desk System File," which has already proved extensively popular, the manufacturers being flooded with demands, is produced by the Ross-Gould List & Letter Co., Tenth and Olive Sts., St. Louis. This file, which is made in several sizes with compartments numbering from four to ten, is designed for the ready classification of letters and other papers upon a busy man's desk, so that any one of them may be quickly found when desired. The compartments are vertical and letters stand on edge without folding; the common-sense of such an arrangement being immediately apparent. The file is composed of interlocking units, each of which has an upright divider made of sheet steel, and these dividers have sufficient spring to them to allow the hand to be put down into a compartment if need be to remove small papers or pencils. Each divider is $7\frac{1}{2}$ inches high and 11 inches long. A four-compartment file occupies a space of only 4 by 11 inches on the desk; a large one of ten compartments, only 10 by 11 inches. An interlocking device for the files makes them firm and substantial.

Trade Literature.**Electric Monorail Hoist.**

The Shepard Electric Crane & Hoist Co., Montour Falls, N. Y., have issued a book of 28 pages, titled "The Aerial Railway of Industry," which relates to the Shepard electric monorail hoist, the track of which is an I-beam set at any desired height above the ground, and hoist carrier has an operating cage. With one of these devices any part of a manufacturing plant or yard can be covered, loads being picked up and carried with safety, speed and precision. The lifting and carrying either raw materials or finished products is such a great factor in all industry that it is given constantly more and more attention by efficiency engineers with a view to raising the percentage of profits. The book is finely illustrated, showing the various applications of these hoists, and there are full descriptions to make everything clear to the reader.

OBITUARY.**Arthur Benedict Bellows.**

A card from the Pittsburgh Testing Laboratory announces the death of its first vice-president, Mr. Arthur Benedict Bellows, which occurred on Saturday, April 17.

Financial News**New Financial Corporations.**

Ala., Townley.—Bank of Townley, authorized capital stock \$25,000, paid in \$15,000, is chartered. A. M. Grimsby, Prest.; G. R. Allison, Cash.

Fla., Lake Hamilton.—First National Bank, capital \$25,000, is chartered. Chas. B. Anderson, Prest.

Fla., Wauchula.—People's Exchange Bank has been consolidated with the Carlton Natl. Bank under the name of Carlton Natl. Bank.

Ga., Hartwell.—First National Bank, conversion of the Hart County Bank, capital \$50,000, is chartered. C. I. Kidd, Prest.; W. E. White, Cash.

Ky., Cynthiana.—Citizens' Bank has begun business with officers as follows: Wade H. Lail, Prest.; S. F. Sprake, V.-P.; O. T. Trent, Cash.

La., Leesville.—American National Bank, capital \$50,000, surplus \$10,000, is inceptd. to begin business about July 1. Dr. F. P. Jones, Prest., and C. K. Powell, Cash.

La., White Castle.—Merchants and Planters Bank, capital \$30,000, is chartered. Inceptd.: J. S. Ware, E. Falcon, H. I. Landry, Guss Weill, Luke Babin, L. N. Folse and others.

Md., Baltimore.—The Baltimore Commercial Bank has agreed to purchase the capital and assets of the Seaboard Bank and the two banks will be consolidated in the near future. This deal will give the Baltimore Commercial Bank a capital and surplus of \$1,000,000, assets of \$8,000,000 and deposits of more than \$5,500,000. Willoughby M. McCormick is Prest. of the Baltimore Commercial Bank and W. Bernard Duke, Prest. of the Seaboard Bank.

Md., Bowie.—A new bank with \$25,000 capital stock has been organized. Nelson O. Ryan, Daniel B. Lloyd, Bernard Macannon, Edward E. Perkins and Thomas B. Littlepage, Incorporators.

Miss., Stewart.—Bank of Stewart, capital \$10,000, is inceptd. Davis Staplea, J. N. Bailey and others.

N. C., Ellerbe.—Bennett Bank & Trust Co., capital stock \$50,000, has been organized. Address Chamber of Commerce for information.

N. C., Mebane.—First National Bank, conversion of the Mebane Bank & Trust Co., capital \$50,000, is chartered. B. F. Warren, Prest.; F. F. Smith, Cash.

Okla., Chattanooga.—First National Bank, capital \$25,000, is chartered. T. G. Shaffer, Prest.; W. E. Bogan, Cash.

S. C., Bamberg.—First National Bank, conversion of Enterprise Bank, capital \$30,000, is chartered. W. A. Klauber, Prest.; W. D. Coleman, Cash.

Tex., Amarillo.—City National Bank, capital stock \$100,000, surplus \$10,000, has begun business. J. H. Pritchard, Prest.; Dr. J. R. Wrather and J. Levy, V.-Ps.; T. H. Reynolds, Cash.

Tex., Dallas.—Empire National Bank with \$1,000,000 capital and \$200,000 surplus being organized by J. D. Gillespie and associates will have officers as follows: Joseph E. Cockrell, Prest.; J. D. Gillespie, V.-P.; O. C. Bruce, Cash; will occupy the former quarters of the Tension National Bank. Charter applied for.

Tex., Fabens.—First National Bank of Fabens, capital \$25,000, is chartered. Frank M. Murchison, Prest.; Chas. L. Betterton, Cash.

Tex., Falfurrias.—First National Bank, capital \$50,000, surplus \$5,000, has applied for charter; will begin business July 1. J. R. Scott, Jr., Prest.; T. R. Bennett, Cash.

Tex., Greenville.—Citizens' State Bank, capital stock \$50,000, is chartered. J. C. Thompson, Prest.; A. S. Moore, Cash.

Tex., Houston.—Houston Land & Trust Co., capital \$1,000,000, is chartered. P. B. Timpson, Prest., and O. W. Weirich, Secy.

Tex., Quitaque.—First National Bank, capital \$25,000, is chartered. Amos Persons, Prest.; Orin Stark, Cash.

Tex., Silverton.—Briscoe County State Bank, capital stock \$25,000, is chartered. W. E. Schott, Prest.; L. B. Richards, Cash.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Va., Fort Blackmore.—Bank of Fort Blackmore, capital \$15,000, is chartered, and will begin business probably Aug. 1. R. W. McConnell, Prest., and J. Melvin Cox, Secy.

Va., Grundy.—First National Bank, capital \$50,000, is chartered. Green Charles, Prest.; F. E. Morgan, Cash.

Va., Harrisonburg.—National Bank of Harrisonburg, conversion of the People's Bank of Harrisonburg, Inc., capital \$150,000, is chartered. J. E. Reherd, Prest.; Thos. P. Beery, Cash.

Va., Stuart.—The Patrick County Bank and the Bank of Stuart, Inc., propose to consolidate under the name of Patrick County Bank, with John W. Fulton, Prest., and J. C. Shockley, Secy.

Va., Vinton.—First National Bank, capital \$50,000, is chartered. Geo. M. Muse, Prest.; F. L. Mitchell, Cash.

New Securities.

Ala., Bessemer.—(School).—Bids received until May 8 for \$300,000 of 5 per cent 20-year bonds. Leonard L. Vann is Supt. of Schools.

Ala., Talladega.—(Sewer).—\$35,000 of sewer refunding bonds have been bought by local citizens. J. W. Vandiver, Mayor.

Ark., Augusta.—(Road).—Sold to Ames, Emerich & Co. and the Union Trust Co. \$325,000 of 5 per cent serial \$1000 denomination bonds of Woodruff County Road Improvement Dist. No. 12, dated Dec. 1, 1919.

Ark., Conway.—(School).—Sold to E. G. Helbron at 95 \$60,000 of 6 per cent bonds of Conway School Dist., Faulkner County, offered on Apr. 24.

Ark., Fayetteville.—(Road).—Sold to Caldwell & Co. of Nashville, Tenn., \$120,500 of 5½ per cent \$500 denomination bonds of Washington County Road Dist. No. 1, dated Feb. 2, 1920.

Ark., Little Rock.—(Bridge).—Bids will be received until 10 A. M. May 25 for \$1,000,000 of 1-26-year serial bonds of Broadway-Main Street Bridge Dist., Pulaski County. Address Geo. W. Donaghey, Chairman. For particulars see *Proposals Department*.

Ark., Mammoth Springs.—(Road).—Reported sold to M. W. Elkins of Little Rock \$750,000 of bonds of North Arkansas Highway Improvement Dist. No. 3, Fulton County.

Ark., Marion.—(Road).—\$1,950,000 of 6 per cent \$500 and \$1000 denomination 1924-1945, inclusive, serial bonds of Crittenden County Road Dists. Nos. 7 and 8, dated Apr. 1, 1920, are being offered by the Bank of Commerce & Trust Co., Memphis, Tenn.

Fla., De Land.—(School).—An election is contemplated on \$30,000 of school bonds. Address School Board.

Fla., Fort Myers.—(School).—Contemplated to issue \$100,000 of 6 per cent \$1000 denomination 30-year serial bonds, dated Apr. 1, of Special Tax School Dist. No. 1, Lee County. Address J. F. Garner, Clk Circuit Court.

Fla., Haines City.—(Street).—Bids will be received until noon May 20 for \$60,000 of 6 per cent city bonds. Address Jed R. Yale, Secy. Board Bond Trustees.

Fla., Key West.—(Road, Bridge).—Bids will be received until 7.30 P. M. June 3 for \$65,000 of 5 per cent \$100 denomination 35-year bonds of Special Road and Bridge Dist. No. 1, Monroe County. Address D. Z. Flier, Clk., County Comms. For particulars see *Proposals Department*.

Fla., Monticello.—(Sewer).—No bids were received for the \$36,000 of 6 per cent \$500 denomination bonds, dated Apr. 1 and offered May 4. John H. Shuman is City Clk.

Fla., Orlando.—(School).—Bids will be received until 10 A. M. May 21 for \$150,000 of 5 per cent \$1000 denomination 30-year serial 1940-1950 bonds of Special Tax School Dist. No. 1, Orange County, dated May 15. Address James A. Knox, Chairman County Board of Public Instruction.

Fla., Panama City.—(Municipal).—Bids will be received until 10 A. M. June 23 for \$50,000, \$100,000 or \$150,000 of 5 per cent 30-year \$1000 denomination bonds, dated Mch. 1. Address The Mayor.

Fla., St. Petersburg.—(Sewer, Gas, Water, Railway, Fire, etc.).—An election will be held soon on the following city bonds: \$125,000 sewer; \$105,000 gas; \$125,000 water; \$50,000 city railway equipment; \$35,000 fire equipment; \$140,000 lighting systems. Address R. E. Ludwig, Director of Public Utilities.

Ga., Brunswick.—(Hospital).—Election June 8 on \$50,000 of city bonds. Address The Mayor.

Ga., Baxley.—(Road).—Election May 12 on \$230,000 of \$1000 denomination Applying County bonds. Address County Comms.

Ga., Colquitt.—(Bridge).—Bids will be received until noon June 1 for \$35,000 of 5 per cent \$500 denomination 1922-1928 bonds of Miller County. Address J. E. Lane, Clerk Board of County Comms.

Ga., Pearson.—(Light and Water-works).—\$30,000 of city bonds have been voted. Address The Mayor.

Ga., Soperton.—(Water-works, School).—Election June 2 on \$20,000 of 6 per cent \$1000 denomination 1931-1950, inclusive, city bonds, dated April 1. Address Will Stallings, Mayor.

Ga., Statenville.—(Road).—Election June 12 on \$70,000 of Echols County bonds. Address County Comms.

Ga., Waynesboro.—(School).—Sold to the Farmers' Bank of Vidette, Ga., at par, \$15,000 of 6 per cent \$500 denomination 5-30-year bonds of Vidette School Dist., Burke County, dated Jan. 1, 1920; voted Feb. 27, 1920, and offered Apr. 30.

Ky., Paris.—(School).—Sold to the Provident Savings Bank & Trust Co. of Cincinnati, O., for \$35,050 and interest, \$35,000 of 5 per cent 10-year average bonds, dated May 1, 1919, and offered Apr. 22.

Ky., Pineville.—(Street).—Bids received until 10 A. M. May 3 for \$8670 of street-improvement bonds. Address Edward Wilson, Mayor.

La., Crowley.—(Road).—No bids were received for the \$55,000 of 5 per cent 30-year \$500 denomination bonds of Road Dist. No. 1, Acadia Parish, offered on Apr. 23. Address Percy T. Ogden.

La., Minden.—(Sewer, Water, Light).—Special dispatch to the Manufacturers Record says that the city improvement bond issue of \$180,000 of 5 per cent bonds was voted May 6 almost unanimously. W. M. Lowe, Mayor; Geo. S. Carroll, City Clk.

La., Monroe.—(School).—Sold to the Ouachita National Bank, Central Savings Bank & Trust Co. and the Citizens' National Bank, all of Monroe, \$200,000 of school bonds. Address Board of Education.

La., Kaplan.—(Drainage).—Sold to Bank of Kaplan at 95 flat \$55,000 of 5 per cent \$500 denomination serial 20-year bonds, dated Dec. 1, 1919; voted Oct. 21, 1919, and offered May 3. A. M. Smith is Secy. Drainage Dist.

La., Opelousas.—(School).—Bids will be received until 10 A. M. May 20 for the following 5 per cent St. Landry Parish School Dist. bonds: \$12,000 Morrow School Dist. bonds, dated May 1 and due 1921 to 1930; \$25,000 Melville School Dist. bonds, dated Nov. 1, 1919, and due 1920 to 1924; all \$500 denomination bonds. Address W. B. Prescott, Supt. of School Board.

La., St. Joseph.—(Electric Light).—The city of St. Joseph will not issue bonds for electric light plant, as had been reported. W. M. Davidson is Mayor.

La., Thibodaux.—(Road).—Election June 15 on \$50,000 bonds of Road Dist. No. 1, Lafourche Parish. Address Police Jury.

Md., Chestertown.—(Fire Equipment, Paving, Improvement).—\$10,000 of city bonds have been voted. Address The Mayor.

Md., Mt. Airy.—(Street, Water).—\$22,000 of city bonds have been voted. Address The Mayor.

Md., Salisbury.—(School).—At the election May 3 the \$200,000 bonds of Wicomico County failed to carry.

Md., Walkersville.—(Paving).—\$30,000 of bonds have been voted. Address The Mayor.

Miss., Cleveland.—(Road).—Sold to the National Bank of Commerce of St. Louis, Mo., \$150,000 of 6 per cent, \$1000 denomination bonds of Boyle Separate Road Dist., Bolivar County, dated Mch. 1, 1920.

Miss., Edwards.—(Light and Power).—Sold to the Bank of Edwards at par and accrued interest and \$25 premium \$7500 of 6 per cent \$500 denomination city bonds, dated May 1 and offered May 4.

Miss., Gulfport.—(Pier, School, Fire Equipment).—Election May 15 on the following bonds: \$20,000 pier, \$60,000 school and \$15,000 fire equipment. Address City Clk.

Miss., Indianola.—(School).—Voted May 1 \$75,000 of Sunflower County bonds. Address County Board of Education.

Miss., Louisville.—(Improvement).—Bids received until May 5 for \$10,000 of 6 per cent \$100 and \$500 denomination city bonds. Address G. W. E. Bennett, Town Clk.

Miss., Louisville.—(Drainage).—Bids received until noon May 1 for \$125,000 of 6 per cent Tallahaga Dist., Winston County, bonds. Address G. W. E. Bennett, Secy. Drainage Dist.

Miss., Meadville.—(Road).—\$400,000 of Franklin County bonds have been voted. Address County Comms.

Miss., Meridian.—(Improvement).—Voted May 4 on \$290,000 of city bonds as follows: \$215,000 paving, \$69,000 bridge, \$15,000 incinerator plant. Address The Mayor.

Miss., Pickens.—(Electric Light).—Contemplated to issue \$10,000 of town bonds. Address The Mayor.

Miss., Senatobia.—(School).—Bids will be received until June 1 for \$12,000 of 6 per cent \$500 denomination serial bonds of Independence Consolidated School Dist., Tate County, voted Apr. 30. Address Elmer H. Jones, Independence, Miss.

Miss., Silver City.—(Drainage).—Sold to the Delta Bank & Trust Co., Yazoo City, Miss., at par, \$300,000 of 5½ per cent \$1000 denomination 20-year bonds of Straight Bayou Drainage Dist. in Humphreys and Sharkey Counties, offered on Apr. 24. W. H. Carroll is Secy. Drainage Comms.

Miss., West Point.—(Improvement).—Bids received until May 6 for \$10,000 of 6 per cent bonds of Clay County Supervisors' Dist. No. 4. Address L. J. Howard, Clerk Board County Supervisors.

Mo., Boonville.—(School).—\$40,000 of bonds of Boonville School Dist. have been voted. Address Dr. Mittelbach.

Mo., Buncheon.—(Road).—\$18,000 of bonds of Bethlehem Special Road Dist. have been voted. Address Dr. A. W. Nelson.

Mo., Joplin.—(Sewer).—No bids were received for the \$291,500 of 5 per cent \$500 denomination 20-year bonds, dated June 1, voted Apr. 6 and offered May 4, and they will be put on the

(Continued on page 134.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.



Cletrac
TANK-TYPE
TRACTOR

Your Production Curve

RIGHT now when *production* is needed as never before—when time-saving is more important than ever—when labor is scarce and costs are climbing steadily higher—the powerful little tank-type Cletrac hustles forward to help you turn your production curve upward.

The sturdy little Cletrac is always ready—attacks any job with all its might. It travels about quickly on its broad metal tracks, turns short in crowded places or travels over soft ground and rough spots with a light, sure tread—moves heavy loads easily and swiftly, day in and day out, doing the work of slow moving teams and many men.

Manufacturers everywhere have O. K'd the Cletrac. Its broad usefulness, economy and ease of operation make it the natural selection of men faced with shop and yard transportation problems. Ask for book "*The Cletrac in Industry.*"

The Cleveland Tractor Co.

"Largest Producers of Tank-Type Tractors in the World"

19187 Euclid Avenue

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market again. Geo. G. Brader is Commr. of Revenues.

Mo., Pilot Grove—(School).—\$30,000 of bonds of Pilot Grove School Dist. have been voted. Address O. Kistenmacher.

Mo., Sedalia—(School).—Election May 13 on \$75,000 of school bonds. Address School Board.

Mo., Springfield—(Road).—At the election Apr. 5 the \$1,500,000 of Greene County bonds failed to carry. Address J. L. Likins, County Clk.

Mo., Springfield—(Road).—Voted Apr. 27 \$8000 bonds of Stockton Special Road Dist., Greene County. Address County Commrs.

Mo., Wheaton—(Road).—Sold to the Bank of Wheaton at par \$25,000 of 5 per cent 5-15-year optional bonds of Barry County.

N. C., Asheville—(Road and Bridge).—Bids received. It is reported, until noon May 10 for \$300,000 of 6 per cent 6-year average bonds of Buncombe County. B. A. Patton is Chrmn. Board of Commrs.

N. C., Belhaven—(Water-works, Sewer).—Bids will be received until 2 P. M. May 23 for \$120,000 of 6 per cent \$1000 denomination bonds as follows: \$60,000 water-works, \$60,000 sewer. Address D. S. Smith, Town Clk. For particulars see *Proposals Department*.

N. C., Belhaven—(Water-works, Sewer).—All bids were rejected for the \$120,000 of 6 per cent bonds offered on Apr. 28.

N. C., Brevard—(Funding).—All bids were rejected for the \$30,000 of not exceeding 6 per cent \$1000 denomination city bonds, dated May 1, 1920, and offered May 1. They may now be sold at private sale at any time. Address G. E. Lathrop, City Clerk.

N. C., Davidson—(School).—Plans for a bond issue have been approved by a meeting of citizens presided over by Mayor James Lee Sloan with Prof. John L. Douglas, Secy. The School Board was asked to take action accordingly.

N. C., Dobson—(Road).—Bids will be received until noon June 7 for \$113,500 of 5 per cent \$1000 denomination 30-year bonds of Surry County. Address Henry Wolfe, County Clk. For particulars see *Proposals Department*.

N. C., Franklinton—(Water and Sewer).—Bids will be received until 2 P. M. May 28 for \$120,000 of not exceeding 6 per cent 24-year average city bonds. Address Geo. L. Cooke, Town Clerk.

N. C., Gastonia—(School).—Sold to Prudden & Co. of Toledo, O., at par, \$25,000 of 6 per cent 20-year Ranlo School Dist. bonds, Gaston County, offered Apr. 10.

N. C., Goldsboro—(Street).—Bids will be received until noon June 1 for \$325,000 of 5½ or 5 per cent 8-year average city bonds. Address C. M. Grantham, City Clerk.

N. C., Hickory—(School).—Bids received until 8 P. M. May 4 for \$35,000 of 5½ per cent bonds, dated Mch. 1, 1920. R. G. Henry is City Mgr.

N. C., Kinston—(Road).—Bids will be received until 11 A. M. June 7 for \$300,000 of 6 per cent \$1000 denomination 1935-1939 bonds of Lenoir County, dated June 1. Address John H. Dawson, County Treasurer.

N. C., Louisville—(Funding, Improvement).—All bids were rejected for the \$78,500 of 6 per cent bonds offered on Apr. 26. A. W. Alston is Town Clk.

N. C., Rocky Mount—(Gas).—Voted May 3 \$160,000 of not exceeding 6 per cent \$1000 denomination serial city bonds, dated June 1, 1920. Date of sale not yet fixed. T. T. Thorne is Mayor.

Okla., Cordell—(City Hall).—Voted Apr. 29 \$40,000 of 6 per cent 5-25-year \$1000 denomination bonds. Address J. W. Corlett, Mayor.

Okla., Duncan—(Water-works).—Voted recently \$38,000 of city bonds. Address The Mayor.

Okla., Muskogee—(School).—Voted May 1 on \$250,000 of not exceeding 5 per cent 25-year bonds. Geo. H. Walker is Mayor and W. W. Gilbert, City Clk.

Okla., Oklahoma City—(Water-works).—Election May 25 on \$300,000 of city bonds. Address The Mayor.

Okla., Pauls Valley—(School).—\$30,000 bonds of Consolidated School Dist. No. 1, Gravis County, have been voted. Address County Board of Education.

Okla., Purcell—(School).—It is contemplated to hold an election soon on bonds of Newcastle School Dist. Address County Board of Education.

Okla., Pryor—(Water-works).—\$35,000 of bonds have been voted. Address The Mayor.

Okla., Shawnee—(School).—Sold to the American National Bank of Oklahoma City \$265,000 of 5 per cent \$500 denomination 5, 10, 20 and 25-year bonds of School Dist. No. 93, dated and voted on Apr. 23.

Okla., Tishomingo—(Road).—Voted May 3 \$380,000 of Johnson County bonds. Address County Commrs.

Okla., Tulsa—(School).—Contemplated to offer for sale approximately \$500,000 of bonds recently voted. Address Board of Education.

Okla., Walters—(Water-works).—\$65,000 of bonds have been voted. W. B. Anthony is City Clk.

S. C., Aiken—(Road).—Bids will be received until 10 A. M. May 25 for \$62,100 of 6 per cent 25-40-year optional Aiken County bonds, dated July 1, 1920. Address W. W. Busbee, Chief Commissioner of Aiken County. For particulars see *Proposals Department*.

S. C., Bennettsville—(Road and Bridge).—Contemplated to issue not exceeding \$150,000 of Marlboro County bonds. Address J. C. Covington, Chrmn. County Highway Commrs.

S. C., Branchville—(School).—Bids will be received until June 1 for \$20,000 of 6 per cent \$1000 denomination 20-year bonds, dated June 1 and voted April 27. Address L. H. Falvey, Chrmn. School Board.

S. C., Greenville—(School).—Bids will be received until 4 P. M. May 31 for \$250,000 of 5 per cent \$1000 denomination 20-year bonds, dated July 1, 1920. Address Geo. W. Sirrine, Secy. Board of Trustees. For particulars see *Proposals Department*.

S. C., Liberty—(School).—No bids were received for the \$31,000 of 6 per cent \$1000 denomination 1920-1940 bonds of Liberty School Dist., voted Mch. 23 and offered May 1, and they will be sold privately. C. E. Bush is Mayor.

S. C., McCormick—(Road).—Bids will be received until June 1 for \$25,000 of 6 per cent 20-year \$500 and \$1000 denomination bonds of McCormick County. Address J. H. Lyon, County Supervisor. For particulars see *Proposals Department*.

S. C., Newberry—(Paving, Water, Sewer, Light).—Voted May 7 the following 5½ per cent city bonds: \$100,000 30-year paving; \$52,000 25-year water-works; \$20,000 15-year sewer; \$18,000 10-year electric light. Address T. K. Johnstone, Secy. Bond Comsn.

S. C., Newberry—(Paving).—City will issue and sell about \$75,000 of 6 per cent street-paving certificates for borrowing purposes. Address Eugene S. Bleas, Mayor.

S. C., St. George—(Road).—Sold to the Farmers' Bank at 97.50 \$100,000 of 6 per cent \$1000 denomination 10-20 and 40-year serial bonds of Dorchester County offered on Apr. 21.

S. C., St. Matthews—(Paving).—Sold to St.

Matthews National Bank at above par \$30,000 of bonds voted Mch. 3.

Tenn., Johnson City—(School).—Bids will be received until noon May 31 for \$150,000 of 5 per cent 11-30-year serial bonds. Address R. C. Warren, City Treas.

Tenn., Memphis—(School).—Bids will be received until noon June 1 for \$250,000 of 5½ per cent \$1000 denomination bonds. Address G. W. Garner, Secy. Board of Education. For particulars see *Proposals Department*.

Tenn., Murfreesboro—(Road).—Bids will be received until 2 P. M. June 1 for \$200,000 of 6 per cent 30-year Rutherford County bonds. Address J. P. Leathers, Clerk County Court.

Tenn., Nashville—(Wharf, Terminal).—The City Commission has authorized the issue of \$300,000 of city bonds. Address The Mayor.

Tenn., Nashville—(Street).—Sold to the American National Securities Co., Harris Trust & Savings Bank and the National City Co., for \$381,026.75, \$380,000 of 6 per cent 7½-year average city bonds, dated April 1 and offered April 27. No bids were received, it is reported, for the \$43,000 of 5 per cent hospital bonds offered on the same day.

Tenn., Pulaski—(Road).—Bids will be received until 1 P. M. May 22 for \$350,000 of 6 per cent 35-year bonds of Giles County, dated July 1, 1920. Address J. C. Hannah, County Judge.

Tex., Alpine—(Water, Sewer).—No sale is reported of the \$35,000 of 5½ per cent water and sewer bonds offered on Apr. 5. Ben. F. Berkeley is Mayor.

Tex., Austin—(Road).—Voted recently \$225,000 bonds of Road Dist. 4, Travis County. Address County Commrs.

Tex., Austin—(Road).—Voted Feb. 23 \$150,000 of 5½ per cent \$500 denomination 30-year bonds of Road Dist. No. 6, Travis County, dated May 1. Address A. F. Smith, Route 2, Manor, Tex.

Tex., Bastrop—(Road).—Election June 1 on \$10,000 bonds of Road Dist. No. 6, Bastrop County. Address County Commrs.

Tex., Coleman—(Road).—\$120,000 of Road Dist. No. 2, Coleman County, bonds have been voted. Address County Commrs.

Tex., Cooper—(Improvement).—Bids received until May 3 for \$500,000 of 5 per cent 1-30-year serial bonds of Delta County. Address I. B. Lane, County Judge. G. B. Simons is County Clk.

Tex., Cuero—(Road).—Bids received until 10 A. M. May 11 for \$40,000 of 5 per cent 1918-1948 \$500 denomination bonds of De Witt County Road Dist. No. 4, voted Aug. 13, 1918, and dated Oct. 10, 1918. G. P. Box is County Clerk.

Tex., Dallas—(Levee).—Contemplated to vote on about \$5,000,000 of bonds about Apr. 1, 1921. Address Dallas County Levee Improvement Dist. No. 10, 806½ Commerce St., Dallas.

Tex., Falfurrias—(Road).—Voted May 1 \$100,000 of not exceeding 5½ per cent 30-year Brooks County bonds. Address County Commissioners.

Tex., Garland—(Water).—Contemplated to vote on \$100,000 of water bonds. Address The Mayor.

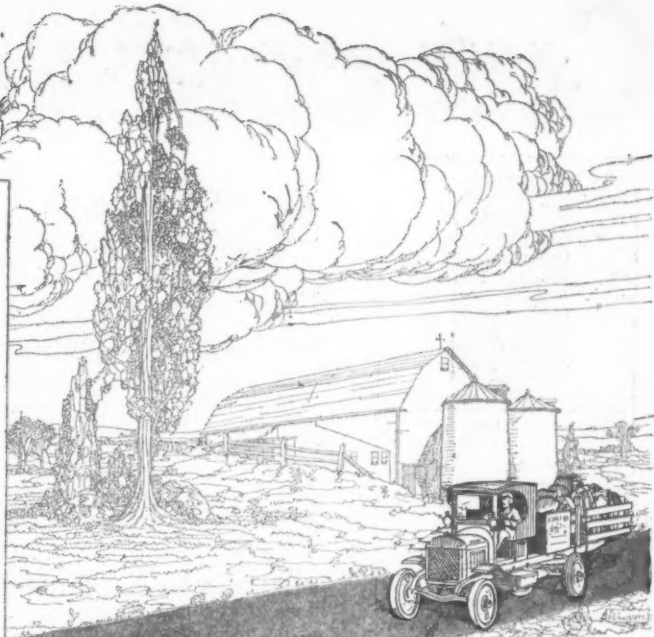
Tex., Hondo—(Road).—\$400,000 of 5½ per cent serial bonds of Medina County have been approved by the Atty.-Gen. Address County Commrs.

Tex., Madisonville—(Road).—Sold to Stix & Co. of St. Louis \$50,000 of 5 per cent \$500 denomination bonds of Madison County Road Dist. No. 2, dated Nov. 16, 1919.

(Continued on page 139.)



*"What did the teamster see
In old days, driving his heavy loads
From farm to town, over hills and prairies?"*



A Vision of BETTER ROADS

WHAT did the teamster see
In old days, driving his heavy loads
From farm to town, over hills and prairies,
Through mud and flood and storm and washout,
By wood-roads and highroads and the great
National Highways from State to State,
His strong horses straining and sweating through
dust or mire—
What did that hardy teamster see
On those long, hard roads behind his laboring team?

Across the years he saw a vision,
Prophetic, happy, haunting and inspired—
A Vision of Better Roads in the days that were to be.
He saw broad, smooth highroads running everywhere
in a vast network over the country,
Roads without dust or mud or weariness or the
constant labor of repair,
Roads pleasant and swift to travel,
Roads clean and safe and paved,
Leading to great cities and friends and business and
on adventurous, delightful journeys,
All over this broad, beautiful land.
He saw himself and his wife going and
returning over these fair highways,
Making trips to town for shopping or pleasure;

He saw his boys and girls going to better schools,
and better satisfied with their home;
He saw an end to dreariness and monotony
and isolation;
He saw his produce carried quickly to market, and
anything he needed brought as quickly
back to his own door;
He saw happiness, comfort and prosperity in that
Vision of Better Roads—
The vision of things which his energy and
resourcefulness and courage are today
bringing to pass.

IT was "A Vision of Better Roads"
that brought forth Tarvia—which
has given smooth, dustless, mudless,
waterproof highways to thousands of
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Cut costs and fire

Cut No. 27
First floor lubricating oil outfit.



Cut No. 38
First floor lubricating oil outfit.



Cut No. 35
First floor lubricating oil outfit.



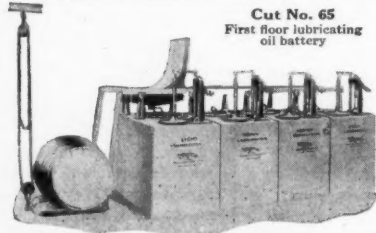
Cut No. 278
Pump for gasoline and oils.



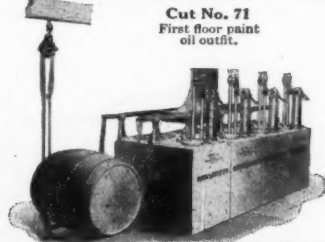
Cut No. 224
Portable tank for lubricating oil.



Cut No. 65
First floor lubricating oil battery



Cut No. 71
First floor paint oil outfit.



EVERY time an "empty" barrel leaves your plant it takes some expensive oil away with it.

Every time an operator stops a machine to "go get some oil" production costs go up.

Every time a fire starts, oil-soaked floors and open oil containers increase the danger.

Cut costs, fire hazards and fire insurance rates with Wayne systems of storage, control and dispensing of oils, gasoline, paints and paint oils.

Learn what it means to deliver oil right to the spot where needed, to control it centrally or locally, to cut insurance rates, to increase production, to lock against unauthorized use, to measure and record all dispensing—large or small.

The oil barrel in your plant is a sign of inefficiency—and America needs all your efficiency today—all your production—all your best planning to cut costs and increase the world's stocks of goods.

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Liquid Storage Systems

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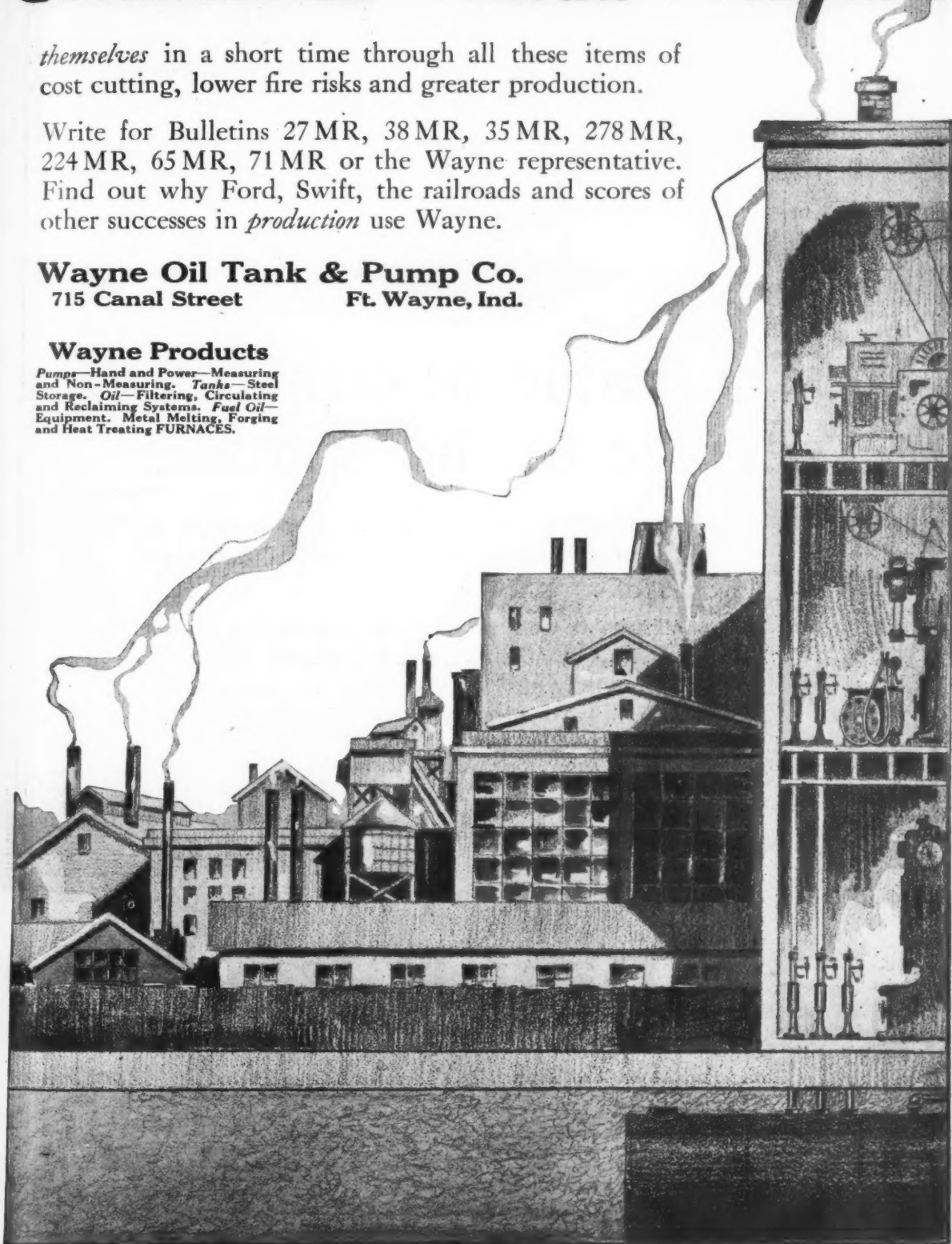
themselves in a short time through all these items of cost cutting, lower fire risks and greater production.

Write for Bulletins 27 MR, 38 MR, 35 MR, 278 MR, 224 MR, 65 MR, 71 MR or the Wayne representative. Find out why Ford, Swift, the railroads and scores of other successes in *production* use Wayne.

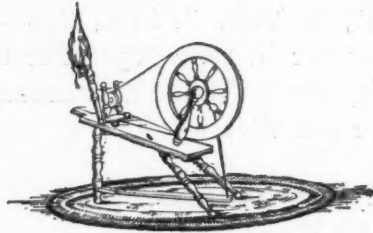
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And the cost of selling through us is no greater, in the end, than disposing of the goods direct or by any other means.

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Tex., Mercedes—(School).—Sold to the State Board of Education, it is reported, \$87,000 of 5 per cent 10-40-year optional bonds of Mercedes Independent School Dist.

Tex., Pampa—(School).—Voted Apr. 19 \$75,000 of 5 per cent 40-year \$1000 denomination bonds of Pampa Ind. School Dist., dated May 1. Address L. C. McMurtry.

Tex., Tehuacana—(School).—Election some time in May on \$25,000 bonds. Address School Board.

Va., Charlotte Court House—(Roads).—Bids will be received until noon, May 17, for the following 6 per cent Charlotte County bonds: \$35,500 of 18½-year average and \$120,000 of 21¼-year average bonds. Address Chairman County Supervisors.

Va., Charlottesville—(Water, Improvement). Voted May 4 on bonds for water system and city improvements. Address The Mayor.

Va., Independence—(Road).—\$90,000 of 6 per cent Grayson County bonds will be issued, one-half of which is to be sold July 1, 1920, and the other half July 1, 1921; one-tenth of the amount of bonds to be paid off each year after issued. Address T. E. Brannock, County Clk.

Va., Potomac—(Sewer).—Bids will be received until 8 P. M. May 12 for \$60,000 of 5, 6½ and 6 per cent 10-30-year optional city bonds voted Oct. 27, 1919. Address J. W. Varney, Mayor.

Va., Portsmouth—(Road and Bridge).—Sale of \$250,000 of 5 per cent \$1000 denomination 20-year Norfolk County bonds advertised for May 1 was postponed until May 11. G. Tayloe Gwathmey is County Clk.

Va., Stuart—(Road).—\$50,000 of Patrick County bonds have been authorized by the County Supervisors. J. M. Hooker, I. C. Dehart and W. L. Joyce are the Committee for Roads.

W. Va., Fairmont—(Road).—Voted April 24 on \$118,000 of Winfield Dist., Marion County, bonds, but on account of irregularities in election, another vote will have to be taken. Address A. G. Martin, County Clerk.

W. Va., Grafton—(School).—Election May 22 on \$49,000 of Flemington Dist. bonds. J. B. Frum is Prest. Board of Education.

W. Va., Princeton—(School).—Election May 25 on \$200,000 of 5½ per cent \$500 denomination bonds of Rock School Dist., Mercer County, dated July 1, 1920. Address J. C. Burton, Prest. Board Education.

W. Va., Union—(Road).—Election June 2 on \$71,000 bonds of Sweet Springs Dist., Monroe County. Address E. S. McNeer, County Clk.

Financial Notes.

Jefferson County Bank, Wadley, Ga., has increased capital stock from \$25,000 to \$30,000.

Central State Bank of Dallas, Tex., will increase capital from \$500,000 to \$1,000,000.

First National Bank of Wichita Falls, Tex., increased capital from \$700,000 to \$800,000.

Bank of Fair Bluff, Fair Bluff, N. C., increased capital stock from \$15,000 to \$25,000.

Half Dollar Savings & Trust Co., Wheeling, W. Va., has increased capital stock from \$50,000 to \$100,000.

Guaranty Bank & Trust Co. of Dallas, Tex., has increased capital stock from \$100,000 to \$1,000,000.

First State Bank of Leakey, Tex., has increased capital stock from \$20,000 to \$25,000.

Hamilton National Bank of Chattanooga, Tenn., increased capital from \$1,000,000 to \$1,500,000.

Citizens' Bank and Trust Co., New Orleans, La., proposes to increase capital stock from \$400,000 to \$1,000,000.

State Bank and Trust Co., Houston, Tex., increased capital stock from \$100,000 to \$200,000.

State National Bank of El Paso, Tex., increased capital from \$110,000 to \$300,000.

Guaranty State Bank of Amarillo, Tex., has increased capital stock from \$75,000 to \$100,000.

Herring National Bank of Vernon, Tex., has increased capital from \$50,000 to \$125,000.

Citizens' National Bank of Tyler, Tex., has increased capital from \$100,000 to \$250,000.

North Birmingham Trust & Savings Bank, North Birmingham, Ala., has increased capital stock from \$50,000 to \$100,000.

The annual convention of the Investment Bankers' Association of America will be held this year at Boston on October 4, 5 and 6.

During the six months from November 1, 1919, to April 30, 1920, inclusive, 355 national banks in the United States increased their capital stock, this in addition to 190 new banks chartered, making the total number of increases of national banking capital 545 for that period.

The Maryland Casualty Co. has established a branch office in Chicago, with Lieut.-Col. Harvey L. Jones as resident manager.

THE AMERICAN COTTON OIL CO.

The Board of Directors on May 4, 1920, declared a semi-annual dividend of three per cent. upon the Preferred Stock and a quarterly dividend of one per cent. upon the Common Stock of this Company, both payable June 1, 1920, at The Liberty National Bank, 124 Broadway, New York City, to holders of record of such stock at the close of business on May 15, 1920.

The Stock Transfer Books of the Company will not be closed.

RANDOLPH CATLIN, Secretary.

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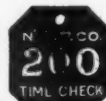
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